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**QPL Data
Editing
Program
Version 4.0**

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QPL Data Editing Program

Version 4.0

The Questionnaire Programming Language (QPL) is a system of programs designed to automate much of the process of gathering and analyzing questionnaire data. This manual describes how to use one of the programs, called KEYPUNCH, to

- enter questionnaire data into the computer,
- make changes to data that have been entered, and
- print records from the data file.

The KEYPUNCH program can be used with either a floppy or hard disk based IBM or compatible personal computer system. It should be installed on your computer according to the instructions given in the manual, *QPL Reference Manual Version 4.0* (Chapter 11). Follow the instructions that the questionnaire designer has given for starting the KEYPUNCH program with his or her particular questionnaire.

Overview

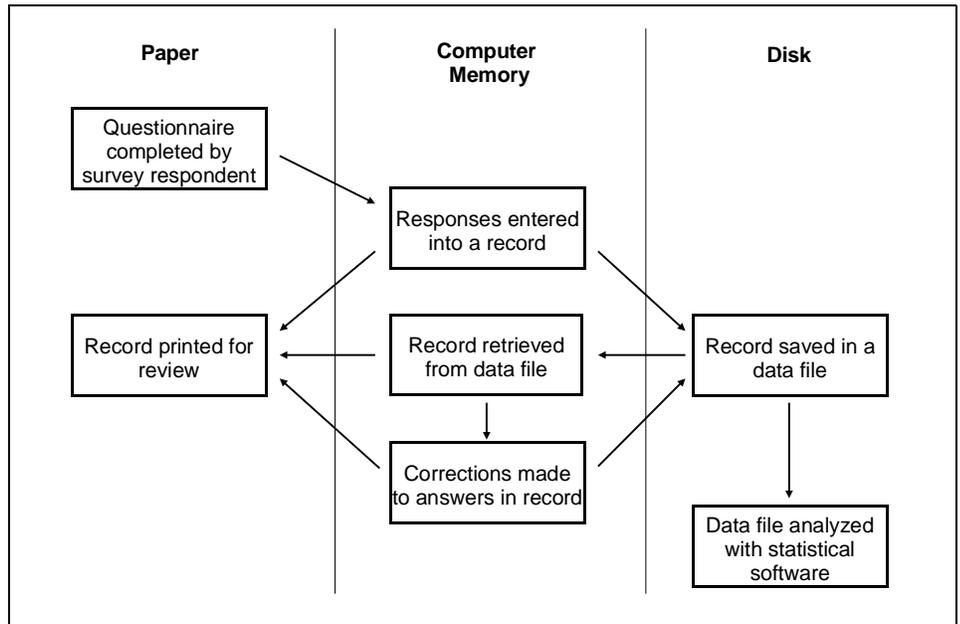
Keypunching questionnaire data is a tedious activity that can be prone to errors. The KEYPUNCH program has been designed to make the computer take on more of the work of correctly transferring questionnaire data into a form that can be statistically analyzed. Using this program, it is relatively easy to enter data from questionnaire forms that have a large number of questions and complex skip patterns. The program will check for many types of errors as you key data in, which increases the chances that you will enter it accurately.

The program also makes it easy to review records that have been added to the file of questionnaire records. Responses that have been keyed into a record can be printed with question numbers or variable names, and in the same format as they appeared in the original document. For example, if the answer to a question was “Yes,” the KEYPUNCH program will print the response that was keyed as “Yes,” and not as a number or some other code. This makes it easy to compare the original questionnaire to the record that was keyed into the computer.

The KEYPUNCH program has a simple design philosophy: you are allowed to enter or edit data from only one questionnaire at a time. Once you have finished entering data, you must save the record (which is in the computer’s memory) to a permanent file of records (on a floppy or hard disk), before you may begin to enter data for a new record. The following diagram traces the flow of data from the original questionnaire, to a record in the computer’s memory, to a file of records on a disk.

This manual describes how to enter or edit data, and how to use command menus to save, retrieve, delete, sort, and print records from the data file on disk.

Flow of Data Through the KEYPUNCH Program



KEYPUNCH Menu

After you have started the KEYPUNCH program, a menu of functions will be displayed across the top of your computer screen. This is called the Main menu. All of the KEYPUNCH functions have been organized under these six categories in this menu. When you select one of the categories, a second menu will be displayed that shows all of the functions that may be performed in that category.

Main Menu

```
Edit Retrieve Save Print Options Quit
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The Edit menu allows you enter data into a new questionnaire record or edit an existing record (after loading it into memory using the Retrieve menu). You must answer the last question in the list in order to return to the Main menu.

The Retrieve menu allows you to load an interview from the data file for editing or printing. It provides several ways of locating records in the data file.

The Save menu is used to save a record, erase a record from memory, delete a record from the data file, or sort the records in the data file.

The Print menu allows you to print formatted listings of one, some, or all of the interview records in the data file.

The Options menu contains functions that allow you to modify how the KEYPUNCH program works. It also has a function that will show the status of your data file, such as how many records are in your file and the total size of the file.

The Quit menu allows you to exit the KEYPUNCH program and return to the DOS command line.

Using the Menus

The KEYPUNCH menus are easy to use and are similar to menus that you may have used in other programs, such as Lotus. They allow you to enter data into a new record, save it, retrieve another record, print it, and so on, in any order you prefer.

When you start the KEYPUNCH program, the first item in the Main menu, Edit, will be highlighted with a bright background. This highlight bar indicates what function will be performed if you press the Enter key. To choose another item, you must first move the highlight bar. You may move the highlight bar using the arrow keys that are on the right side of your key board. (Note: The arrow keys will not function properly if the NumLock key is on. That is, if the keys are set as numbers, instead of arrows.) You can move the highlight bar to the left or right using the left and right arrow keys.

Once you have selected an item from the main menu, a second menu will be displayed directly underneath the item you selected. This is called a “drop-down” menu. It shows all the functions that may be performed for that item. Use the highlight bar to select which function you want to perform, and then press the Enter key to execute that function. If you do not want to perform any of the functions listed in the second menu, press the Escape key to back up to the Main menu. The Escape key can always be used to back up or cancel any function that you have started.

Menu Key Summary

left	Move highlight bar to the left
right	Move highlight bar to the right
up	Move highlight bar up
down	Move highlight bar down
Enter	Execute highlighted menu item
Esc	Back up to main menu or cancel function

Once you become familiar with the KEYPUNCH menus, you may want to use the special “hot” keys to speed up your menu selections. When the highlight bar is on the main menu, you can type the first letter of one of the item names to automatically select and display its drop-down menu. When the highlight bar is on one of the drop-down menus, you can type the first letter of an item to make the highlight bar jump directly to that item. The function is not executed, however, because the names of more than one item may begin with the same letter.

You may also use the function keys to start certain functions. If a function can be started with a function key, the name of the function key will be shown on the drop-down menu. The function keys allow you to automatically jump to another drop-down menu and execute a function.

KEYPUNCH Menu Function Keys

F1	Retrieve previous record
F2	Retrieve next record
F3	Retrieve same record
F4	Retrieve by record number
F5	Print current record in memory
F6	Print all records
F7	Quit KEYPUNCH program
F8	Erase current record in memory
F9	Display system status
F10	Save record in memory to data file

Edit Menu

The Edit menu lets you enter a new record or make changes to an existing record. You can edit an existing record by first using one of the Retrieve menu commands to select and load a record, and then use the Edit menu to begin making changes. You can enter information in a new record if you select the Edit menu when no record is loaded (*i.e.*, the screen is blank). The number of the record you are editing will be displayed in the lower left-hand corner of the screen. If you are entering a new record, the word “New” will be displayed.

A highlight bar indicates which question you are editing. You can move the highlight bar up and down the list of questions using the PgUp and PgDn (or Enter) keys. The first line of text of a highlighted question is displayed at the top of the screen. Questions that should be skipped, according to the instructions written by the questionnaire author, are indicated with their variable names in bold. The highlight bar automatically skips these questions when you press the PgDn or PgUp keys. If you enter an answer that causes the skip path to change, the colors of the question names will also change to show the new path. The list will automatically scroll up and down when you reach the bottom or top of the screen.

Edit Screen

Text of highlighted question → Please enter player's name.

Highlight bar → **4:NAME**

Question number → 4

Question name → NAME

Questions in bold type are off the current skip path → **12:MAKESURE**

Answers in bold type are automatically entered

Record number → 1

Answer list → Keith Lenert

Date → 7/5/1991

Time → 1:47 p.m.

1:VRSN	01
2:INDATE	9-09-1989
3:INTIME	9:56 a.m
4:NAME	Keith Lenert
5:COLLEGE	University of Virginia
6:PLAYER	0
7:PHONE	(202)231-2312
8:TTL	Press ENTER to begin...
9:START	Yes, respondent answered
10:V1	Press ENTER to begin...
11:FINISH	Save answers
12:MAKESURE	Yes, erase these answers
13:ENDTIME	9:56 a.m.

You must answer the last question in the questionnaire in order to get back to the Main menu.

Answers to questions that are shown in bold are automatically answered by the computer. These questions include information such as the time and date that data were first entered into the record. The questionnaire author also can write other types of questions that are automatically answered. You cannot change the answers to these questions directly. The computer will answer them according to instructions the author used in his or her questionnaire program.

Entering Data

The KEYPUNCH program lets you enter information for six different types of questions:

- Multiple choice,
- Check-all-that-apply,
- Number,
- Short answer,
- Long, open-ended answer, and
- Date.

How you enter information for each type of question varies, and specific instructions are given below. Certain commands, however, are common to all six types of questions. You may move forward through the list of questions, one at a time, by pressing the Enter or PgDn (page down) keys. You can move backward by

pressing the PgUp (page up) key. Pressing the Escape key lets you jump to the end so you may exit the questionnaire quickly.¹ Finally, you can press the F1 key to display a list of the keys that are used for the particular type of question that is highlighted or F2 to display the full text of a question.

Jumping to a Question

You may also jump directly to a question by pressing the F3 key or holding the Control key down and then pressing the Home key (*i.e.*, Ctrl-Home). If you do this, a small dialogue box will be displayed in the middle of the screen that asks what question you want to jump to. You may type in either the question's variable name or its number, and then press Enter to jump to that question (or the Escape key to cancel this operation). You are only allowed, however, to jump to questions that are current skip path (*i.e.*, questions that are not highlighted in bold on the computer screen). This path is determined by answers that have already been entered and the skip instructions that were programmed by the questionnaire author.

Go To Question Dialogue Box

1:VRSN	01
2:INDATE	9-09-1989
3:INTIME	9:56 a.m.
4:NAME	Keith Lenert
5:COLLEGE	University of Vi
6:PLAYER	0
7:PHONE	(202)231-2312
8:TTL	Press ENTER to b
9:START	Yes, respondent
10:V1	Press ENTER to begin...
11:FINISH	Save answers
12:MAKESURE	Yes, erase these answers
13:ENDTIME	9:56 a.m.

1 | 7/5/1991 | 1:47 p.m.

Press F4 for question list.

If you do not remember the name or number of a question, you can press the F4 key to bring up the Question List dialogue box. This dialogue box lists all the questions by their variable names and shows the first line of the question, its number, what type of question it is, and its field size. Use the arrow keys to move the highlight bar to the name of the question you want to jump to, and then press the Enter key to close the list and fill in the name in the "Go to question" dialogue box. Then press Enter again to jump to the question.

¹Exactly what question you will go to depends upon how the questionnaire was programmed.

Question List Dialogue Box

VRSN	INDATE	INTIME	NAME	COLLEGE	PLAYER	PHONE
TTL	START	V1	FINISH	MAKESURE	ENDTIME	
Please enter player's name.						
			Question 4	STRING	20 Bytes	
6:PLAYER	0		Go to question:			
7:PHONE	(202)231-2312		<input type="text"/>			
8:TTL	Press ENTER to b					
9:START	Yes, respondent					
10:V1	Press ENTER to begin...					
11:FINISH	Save answers					
12:MAKESURE	Yes, erase these answers					
13:ENDTIME	9:56 a.m.					
1			7/5/1991 1:47 p.m.			
Press F1 for help.						

Global Edit Key Summary

PgDn or Enter	Record answer and move to the next question
PgUp	Record answer and move to the previous question
Esc	Record answer and jump to the last question
F1	Display help screen key summary
F2	Display full text of question
F3, Ctrl-Home	Jump to question you specify (Esc to cancel)
F4	Display question list (after using F3 to start Jump dialogue box)

Control List

In some applications, the questionnaire designer may have set up a database that lists the names of cases that need to be entered. This is called the "Control List." If this has been done, the KEYPUNCH program will show you the list of cases that are still outstanding or incomplete before you begin editing a new case.² You must select one of these cases before you may begin entering data for a new record.

The Control List will be displayed in the middle of the screen, and the first case will be highlighted with a bright background. You can use this highlight bar to select which case you want to enter. Move the highlight bar up and down the list using the up and down arrow keys. If the list is very long, you can move through the list one page at a time using the PgUp and PgDn keys.

After you have highlighted the case you want to use, press the Enter key to select that case and begin entering data (or press the Escape key to cancel this function and return to the Main menu). Information from the Control List data file will be

²You may turn the Control List off by unchecking the "Use control data file" option on the Options menu. Do this only when you must enter data for a case that was not included in the Control List.

Control List Dialogue Box

Edit Retrieve Save Print Options Quit	
Soccer Team Survey	
1991 Season	
Control List	10
Keith Lenert, University of Virginia	
Stephen Pfeil, American University	
Duncan Reynard, England	
Keith Trehy, American University	
Walter Tombini, Argentina	
Abdulwhab al-Kaldi, American University	
Omid Namazi, West Virginia	
Jean Harbor, Alabama A&M	
Marcelo Bauza, Argentina	
Leonel Sauzo, Honduras	

automatically copied to one or more questions, depending upon how it was programmed by the questionnaire author.

The Control List will not be displayed if you are editing a record that was retrieved from the data file on a disk using one of the Retrieve menu functions. In this case, you are allowed to edit answers that were copied from the control data file. Any changes you make, however, will not be copied back to the original control data file.

Control List Key Summary

up	Move highlight bar up the list
down	Move highlight bar down the list
PgDn	Move down the list by one page
PgUp	Move up the list by one page
Enter	Select a case and begin entering data
Esc	Return to the Main menu

Multiple Choice Questions

Multiple choice questions have a list of one or more answers. Only the currently selected answer will be displayed on the answer line. You may change this answer by toggling through the answer list using the up and down arrow keys or by typing the first letter of an answer. When your choice is displayed, press the Enter or PgDn keys to record your answer and move to the next question.

You may back up to a multiple choice question, using the PgUp key, and change your selection as often as you like.

Multiple choice questions have a special feature that the other question types generally do not have. Sometimes choosing a certain answer will make the KEYPUNCH program jump to a different series of questions. For example, if one

of the questions was “Do you drink diet sodas?,” answering yes may make the KEYPUNCH program jump to a series of questions about soda flavors, while answering no would make it skip over these questions.

If you back up and change your answer in one of these branching questions, the KEYPUNCH program will go to the question that follows from your new answer. These skips are defined in the questionnaire and may not always be used. The skip path is automatically updated every time you answer a question. Questions that will not be asked, according to the skip instructions, are indicated when their variable names and numbers are shown in bold on the Edit screen.

Multiple Choice Question Key Summary

up or left	Toggle up through the answer list
down or right	Toggle down through the answer list
character	Select the next answer that starts with this character
Home	Select the first answer
End	Select the last answer
Enter or PgDn	Record answer and move to the next question
PgUp	Record answer and move to the previous question
Esc	Record answer and move to preset question (optional)
F1	Display help screen key summary
F2	Display full question text
F3, Ctrl-Home	Record answer and jump to question you specify (Esc to cancel)
F4	Display question list (after pressing F3 to start Jump dialogue box)

Check-All-That-Apply Questions

Check-all-that-apply questions allow you to select more than one answer from a list or to select none of the answers. Before you highlight one of these questions, only the numbers of the answers that are checked will be listed on the screen (or the word “None,” if none of the answers are checked). When you highlight it, a dialogue box will be displayed that lists all the answers. Check marks will be shown next to answers that have been checked. Move the highlight bar to the answer you want to check by using the up and down arrow keys or by typing the first letter of an answer. After you have highlighted your answer, press the space bar to put a check next to it. You can remove the check mark by highlighting an answer and pressing the space bar again.

After you have finished checking your answers, press the PgDn or Enter keys to go to the next question. The dialogue box will close, and the numbers of the answers you checked will be listed.

**Check-All-That-Apply Question
Key Summary**

up or left	Move highlight bar up
down or right	Move highlight bar down
character	Move highlight bar to the next answer that starts with this character
Home	Move highlight bar to the top of the list
End	Move highlight bar to the bottom of the list
space bar	Toggle check mark on or off
Enter or PgDn	Record answer and move to the next question
PgUp	Record answer and move to the previous question
Esc	Record answer and jump to the last question
F1	Display help screen key summary
F2	Display full question text
F3, Ctrl-Home	Record answer and jump to question you specify (Esc to cancel)
F4	Display question list (after pressing F3 to start Jump dialogue box)

Note: No other keys do anything. The computer will beep if any other keys are pressed.

Number Questions

Number questions are displayed on the screen with a flashing cursor on the right side of the answer line. Enter numbers here just as you would using a calculator. Use the number keys along the top of the keyboard, or you can use the number pad on the right side of the keyboard if you switch it from arrows to numbers with the NumLock key.

If a question allows a number with a decimal point, the decimal point will be displayed on in the highlighted line. The numbers you type will slide past the point. Be sure your number is aligned correctly with the decimal point before proceeding to the next question.

The questionnaire author may also have specified a specific range of answers that may be entered. This range can be from either a specific high or low number, or a number that was entered in a previous question. If you enter a number that is outside of this range, the computer will beep and display an error message on the bottom of the screen. This message will also tell you what the highest or lowest allowable answer is. You must enter an answer that is within this range before you may move to the next question.

If you do not have an answer for a number question (such as when the person who returned the questionnaire did not fill in an answer), you should enter a "Don't know" response by pressing the question mark key. This automatically changes the number to a question mark, which indicates that the answer to this question was not available.

Numeric Question Key Summary

0 through 9	Enter a digit
-	Toggle minus sign on and off (when number is not zero)
? or /	Set answer to "Don't know"
Del or backspace	Delete the right-most digit
Ctrl-End	Erase the number (<i>i.e.</i> , set it to zero)
PgDn or Enter	Record answer and move to the next question
PgUp	Record answer and move to the previous question
Esc	Record answer and move to preset question (optional)
F1	Display help screen key summary
F2	Display full text of question
F3, Ctrl-Home	Record answer and jump to question you specify (Esc to cancel)
F4	Display question list (after pressing F3 to start Jump dialogue box or F9 to start calculator)
F9	Use pop-up calculator (Esc to cancel)

Note: You may not type a decimal point or comma in a number.

Pop-Up Calculator

The number question also has a pop-up calculator that you can use to compute an answer. For example, if a question asked the respondent for a percentage but he or she only knew the totals, you could use the calculator to compute the percentages. The calculator will automatically copy the result into the answer to the question.

Start the calculator by pressing the F9 key after you have highlighted a number question.

You must type your equation on one line, using parentheses to group operations as necessary. In the example below, a percentage will be computed. When the Enter key is pressed, the calculator will first divide 22 by 37, and then multiply

Pop-Up Calculator

```
Enter player's playing time percentatge.
1:VRSN          01
2:INDATE        9-09-1989
3:INTIME        9:56 a.m
4:NAME          Keith Lenert
5:COLLEGE       Universi
6:PCTPLAY      0.0% of g Enter equation:
7:PHONE        (202)231-
8:TTL           Press ENT 22 / 37 * 100_
9:START        Yes, resp
10:V1           Press ENTER to begin...
11:FINISH       Save answers
12:MAKESURE    Yes, erase these answers
13:ENDTIME     9:56 a.m.

| 1 | _____ 7/5/1991 — 1:47 p.m. —
Press F4 for question list.
```

the result by 100.³ The final result, 59.5, will be displayed in the dialogue box where you could use it in another equation. If you press Enter a second time (without changing the result), the calculator dialogue box will close and the answer will be put into the answer field. You may close the dialogue box without changing the answer by pressing the Escape key.

Pop-Up Calculator Key Summary

A-Z, 0-9, ^ * / @ + - () .	Enter numbers, variable names, math operators, or functions
left or up	Move cursor left without altering the text
right or down	Move cursor right without altering the text
Home	Move cursor to the left end of the highlighted line
End	Move cursor to the space after the last character
backspace	Move the cursor to the left and delete that character
Del	Delete the character at the cursor position
Ctrl-End	Erase from the cursor to the right end of the line
Enter or PgDn	Calculate equation (first time)
Enter or PgDn	Quit calculator and use result for an answer (second time)
PgUp	Recover last equation
Esc	Quit calculator without using result for an answer
F1	Display edit keys, math operator hierarchy, and function and keyword lists

Note: The calculator editor is always in an insert mode.

Short Answer Questions

Short answer questions are used to enter short phrases, such as your initials or name. You may type letters, numbers, and punctuation characters in this space. Lowercase letters are automatically converted to uppercase, regardless of how the CapsLock (shift lock) key is set unless the questionnaire designer has turned this feature off. The computer will beep when you reach the end of the line. You cannot type beyond this point. This is all the space that the questionnaire author has allowed for this answer. If necessary, use abbreviations that have been specified by the questionnaire author in your answers.

The short answer question has some simple editing capabilities that allow characters to be inserted and deleted in the answer. These functions are listed in the key summary below.

The questionnaire author also may have specified a specific range of answers that may be entered. The range is checked alphabetically. If you enter a word or phrase that is too high or too low, the computer will beep and display an error message on the bottom of the screen. This message will also tell you what the

³The names of questions also may be used in equations. The current value of question will be substituted for the name when the calculator processes the equation. See chapter 4, *QPL Reference Manual Version 4.0*, for more information on the QPL equation processor.

highest or lowest allowable answer is. You must enter an answer that is within this range before you can move to the next question.

If the respondent does not know the answer, you can specify a “Don’t know” response by typing a question mark in the first column of the answer. This automatically erases whatever else may have been typed in.

Short Answer Question Key Summary

A-Z, 0-9	Enter alphanumeric characters
left or up	Move cursor left without altering the text
right or down	Move cursor right without altering the text
?	Set answer to “Don’t know” response (if in the first column)
Home	Move cursor to the left end of the highlighted line
End	Move cursor to the space past the last character of the highlighted line
backspace	Move the cursor to the left and delete that character
Del	Delete the character at the cursor position
Ctrl-End	Erase from the cursor to the right end of the line
Enter or PgDn	Record answer and move to the next question
PgUp	Record answer and move to the previous question
Esc	Record answer and move to preset question (optional)
F1	Display help screen key summary
F2	Display full text of question
F3, Ctrl-Home	Record answer and jump to question you specify (Esc to cancel)
F4	Display question list (after pressing F3 to start Jump dialogue box or F9 to start calculator)

Insert and Type-Over Modes

A short answer question may be in either an insert or a type-over mode. Which mode it is in depends how the question was programmed by the questionnaire designer. Formatted answers (*i.e.*, answers that let you type in only certain parts of the answer line, such as “State: ____”) are always in a type-over mode. In this mode, deleting a character with the Delete or backspace keys simply replaces the character with a blank space; the right side of the line is not moved to the left.

Non-formatted answers are always in an insert mode. Here, you may insert characters by typing them where you want them. You must use the backspace, Delete, or Ctrl-End keys to erase characters.

Open-Ended Questions

The open-ended question allows long narrative answers to be entered during an interview. Each answer may be several paragraphs or several pages long. There are no restrictions on what may be typed as a response in this type of question.

This question has basic word-processing features, such as automatic word wrapping, screen scrolling, block copying, block deleting, and word searching. You may toggle between insert and type-over modes by pressing the Insert key. All of the word-processing functions are summarized in the following table.

Open-ended questions are different from the other questions, however, because you must press the Escape key to go to the next question instead of the PgDn or Enter keys, which are used for their customary word processing functions.

Open-Ended Question Key Summary

Esc	Record answer and move to the next question
F1	Display help screen key summary
F2	Display full text of question
F7	Toggle between ragged and right-justify modes
F8	Toggle display of hard and soft carriage returns on and off
F9	Toggle display of soft spaces on and off
F10	Reformat paragraph (<i>i.e.</i> , update line breaks after a insertion or deletion; put cursor anywhere in paragraph before pressing F10)
Ins	Toggle between insert and type-over modes
Enter	Mark end of paragraph (<i>i.e.</i> , enter a carriage return; insert mode must be on)
Tab	Insert spaces to next tab stop
Del	Delete character at cursor
backspace	Delete character to left of cursor
Ctrl-Y	Delete line at cursor
arrow keys	Move cursor
Ctrl-A	Move cursor one word to the left
Ctrl-F	Move cursor one word to the right
Ctrl-Z	Scroll up one line
Ctrl-W	Scroll down one line
PgUp	Scroll up one page
PgDn	Scroll down one page
Home	Move cursor to the beginning of the line
End	Move cursor to the end of the line
Ctrl-PgUp	Move cursor to the beginning of the answer
Ctrl-PgDn	Move cursor to the end of the answer
Ctrl-Home	Move cursor to the top of the page
Ctrl-End	Move cursor to the bottom of the page

Alt-M	Begin marking a block of text starting at cursor position (use arrow keys to stretch highlighted block)
Alt-C	Put a copy of the marked block in a temporary buffer
Alt-X	Delete marked block and put a copy in a temporary buffer
Alt-P	Paste text from temporary buffer at cursor
Alt-S	Search for a word (press Enter to begin searching, Esc to quit)

Note: Several of these functions require you to use the Ctrl (control) or Alt (alternate) keys in combination with another key in order to perform a function. For example, "Ctrl-PgUp," means hold the Ctrl key down and then press the PgUp key.

Date Questions

Date questions display a date on a single answer line. To enter a date, you must type the number of the month, then the day, and finally the last two digits of the year.⁴ The cursor automatically skips over the dashes that separate the parts of the date. If the number of the month or day is less than 10, you must be sure to precede the number with a zero so that the number is correctly aligned.

The date question does not allow an invalid date to be entered. For example, if you try to enter February 31, 1989, the computer will beep and move the cursor to number of days after you press Enter. You must change it to a valid date before you may go to the next question.

The questionnaire author may have also limited the range of dates that can be entered. If you enter a date that is too early or too late, the computer will beep and display an error message that shows the earliest or latest allowable date. You must enter a date that is within that range before you can move to the next question.

If the respondent does not know the answer, you may specify a "Don't know" response by typing a question mark in the first column of the date. The rest of the answer will be erased and any range limitations will be ignored when you press Enter or PgDn to go to the next question.

⁴The questionnaire designer may instead use another version of the date question that requires all four digits in the year to be entered. This is usually done so that dates later than 1999 may be entered.

Date Question Key Summary

0-9	Enter a number
left or up	Move cursor left without altering the text
right or down	Move cursor right without altering the text
?	Set answer to "Don't know" response (must be in the first column)
Home	Move cursor to the left end of the highlighted line
End	Move cursor to space following the last character
backspace	Move the cursor to the left and delete that character
Del	Delete the character at the cursor position
Ctrl-End	Erase from the cursor to the right end of the line
Enter or PgDn	Record answer and move to the next question
PgUp	Record answer and move to the previous question
Esc	Record answer and jump to the last question
F1	Display help screen key summary
F2	Display full text of question
F3, Ctrl-Home	Record answer and jump to question you specify (Esc to cancel)
F4	Display question list (after pressing F3 to start Jump dialogue box)

Note: The date question is always in a type-over mode. That is, you may change a number by typing over it.

Retrieve Menu

Before you can edit a record, you must first copy it from the data file on your disk to the memory of the computer. The Retrieve menu provides several different ways of doing this. Using the Retrieve menu functions, you may

- page forward and backward one record at a time,
- pick out a record by number,
- search for records that meet certain criteria, or
- search for records by matching a phrase (*i.e.*, string)

Retrieve Menu

Edit	Retrieve	Save	Print	Options	Quit
Next record				F2	
Previous record				F1	
Same record				F3	
By record number				F4	
Forward numeric search					
Backward numeric search					
Forward string search					
Backward string search					

Next, Previous, and Same Record

The first three functions on the Retrieve menu allow you to page forward and backward, record by record, through the data file. Each time you select either of these commands, the next record will be copied from the file into the computer's memory and displayed on the screen. Once you have found the record you want to edit or print, press the Escape key to return to the Main menu. The "Same record" function allows you to copy the last record you saved to the data file back into the computer's memory.

By Record Number

The fastest way to retrieve a particular record is to ask for it by its record number. This number describes its physical position in the data file. For example, record number one is the first record in the data file, record number two is the second record, and so on. When you select this function, a dialogue box will be displayed in the middle of the screen that asks you for the record number. After you have typed it in, press the Enter key to retrieve it. You may cancel this function by pressing the Enter key without typing a number, or by pressing the Escape key.

An error message box will be displayed if you enter a record number that is greater than the total number of records. Press any key to erase the error box and return to the record number dialogue box.

Forward and Backward Numeric Search

The numeric search functions allow you to find an interview record based on how one or more questions were answered. For example, these functions allow you to find the next record in which the respondent answered "Yes" to a question and had an income less than \$20,000 (the answer to another question).

The forward search function begins searching from its current position in the data file toward the end of the file. The backward search moves toward the beginning of the file. Both functions will wrap-around at the ends of the file and keep searching until they reach the record they started from, unless a matching record is found. The record number that is being processed is shown in the lower left-hand corner of the screen.

When you select this function, a dialogue box will be displayed in the middle of the screen that asks you to enter a search expression. You may enter any valid QPL expression that, when evaluated for each record, results in a true or false value. You can refer to any numeric questions by their variable name or by their question number if you precede the number with a "#" sign. If you do not know the name of the question you want to use, you may press the F4 key to display a list of the question names. Highlight the name of the one you want to use and then press the Enter key to automatically copy it to the Numeric Search dialogue box.

Example

```
INDATE < 19890701 AND #3 < 112
```

In this example, the record selection criterion has been based on the response to two questions: INDATE and question number three. Here, a record will be retrieved if INDATE is earlier than July 1, 1989, and if the answer to question number three is less than 112.

You may also use the keyword RECORD in an expression to identify interviews by their record number (*i.e.*, the record's physical location in the data file).

Example

```
RECORD = 10
```

In this example, the RECORD keyword will load record number 10, if it exists. This expression is equivalent to using the "By record number" function on the Retrieve menu.⁵

Press the Enter key to begin searching the data file. The search functions will either load the next record that meets your search criteria or display an error message saying that it could not find a matching record. You may stop searching by pressing the Escape key.

Press the Enter key again to search for the next record or press the Escape key to return to the Retrieve menu. You may also quit the numeric search dialogue box by entering a blank expression.

If you want to change an expression that you have already entered, simply select the numeric search function again and edit the expression using the backspace, Delete, and Ctrl-End (*i.e.*, delete from the cursor to the end of the line) keys.

Forward and Backward String Search

When you select one of these functions, a dialogue box will be displayed in the middle of the screen that asks which question you want to search and the phrase you want to search for. You may enter either the variable name of a question or its number. If you do not know the name of the question you want to use, you may press the F4 key to display a list the question names. Highlight the name of the one you want to use and then press the Enter key to automatically copy it to the String Search dialogue box.

⁵See chapter 4, *QPL Reference Manual Version 4.0*, for more information on how QPL expressions are evaluated.

After you have entered the variable name, press the Enter key to begin entering the search phrase. The phrase may be any combination of letters and numbers. Upper and lowercase letters are treated equivalently during the search. For example, the word “automobile” will match a record that has the word “AUTOMOBILE” anywhere in the field you specified.

The string search function is considerably faster than the numeric search function because it does not have to load each complete record as it scans the data file. Thus, you may find it useful when searching a numeric field of a very large file. Since the numbers will be treated as strings, however, you must be careful to enter them using the same format with which the data are stored in the file.⁶ For example, although dates are displayed in MMDDYY year format by the KEYPUNCH program, they are stored in the file in YYMMDD format. Also, since this function always does a substring search, the number “12” will match a record that contains the number “312” in the field. Since numbers are always right-justified within numeric fields in the data file, you can often minimize this problem by typing a space before your number.

Example

```
Variable: N1  
Phrase: 12
```

In this example, a record will be retrieved if the KEYPUNCH program finds the phrase “12” or “1234” anywhere in the answer to question N1, but it will not match the phrase “312.”

Press the Enter key after you have entered a phrase to begin searching the data file for a matching record. The forward search function begins searching from its current position in the data file toward the end of the file. The backward search moves toward the beginning of the file. Both functions will wrap-around at the ends of the file and keep searching until they reach the record they started from, unless a matching record is found. The record number that is being processed is shown in the lower left-hand corner of the screen. You can stop the search by pressing the Escape key.

You can quit the string search dialogue box and return to the Retrieve menu by pressing the Escape key or by not entering a variable name.

If you want to delete or change a search phrase that you have already entered, select the string search function again and edit the variable name and phrase

⁶See chapter 5, *QPL Reference Manual Version 4.0*, for more information on QPL data file formats.

using the backspace, Delete, and Ctrl-End (*i.e.*, delete from the cursor to the end of the line) keys.

Save Menu

The Save menu contains several functions that you can use to save new records or resave records you have edited, delete records from memory or the data file, and sort the records in the data file.

Save Menu

Edit	Retrieve	Save	Print	Options	Quit
		Save record to data file	F10		
		Automotically save records			
		Erase record in memory	F8		
		Delete record from data file			
		Sort records			

Save Record to Data File

The “Save record to data file” function on this menu will store the record you have in the computer’s memory to the data file on floppy or hard disk. The program will automatically append a new record to the end of the data file. If the record you have on the screen was retrieved from the data file for changes in certain answers, the program will automatically replace the old record in the data file with the record you edited. Once the record has been saved, the screen will be blanked, indicating that you do not currently have a record in the computer’s memory.

Unlike the COLLECT program, which automatically saves or resaves a record after you have answered the last question, you must use this function to tell the KEYPUNCH program when to save your record. Although the questionnaire author will typically use a finishing question that asks whether you wish to save or erase your answers to the questionnaire, the KEYPUNCH program only uses this information to determine whether the Save function may save the record or not. This gives you the flexibility of deciding whether you want to resave the record with any changes you have made.

Automatically Save Records

Normally, when you choose a function that would cause the current record to be lost, the KEYPUNCH program will display a dialogue box that asks you if you first want to save the current record. Choose the “Erase” option if you do not want to save the current record. You may also press the Escape key to abort the function you started.

You may instead check the “Automatically save records” option to tell the KEYPUNCH program to always save the record in memory whenever you choose

a function that would erase it, such as retrieving a new record. This option is useful when you are editing a number of questionnaire records at one time. You can toggle the check mark on and off by first moving the highlight bar to the option and then pressing the Enter key or the space bar. Press the Escape key to return to the main menu.

Erase Record in Memory

The “Erase record in memory” function erases the record currently on the screen and replaces it with a new empty record. This is useful when you do not want to save the record you are working on. This function does not, however, remove the record from the data file. This may be done, if necessary, using the next function, “Delete record from data file,” or by using the CONVERT program.

Delete Record From Data File

The “Delete record from data file” function can be used to physically remove a record from your data file. All of the following records will be moved up one position after the record you select is deleted (*i.e.*, their record numbers will decrease by one). You must use a Retrieve menu function to load the record you want to delete before starting this function. This tells the KEYPUNCH program which record you want to delete. The deleted record, however, will not be permanently lost after you use this function. It will be added to another file of deleted records that has the same name as your data file, but has an “DEL” extension.

Sort Records

The “Sort records” function can be used to sort the records in your data file by as many as six levels, or questions, at one time. You also may specify the direction for each level of your sort: either ascending or descending.

After you start this function, the Sort Records dialogue box will be displayed on the screen. First, enter the name or number of the question you want to sort the records by, and then press the Enter key to move the highlight bar to the next field to specify the direction that question should be sorted. The default is “A,”

Sort Records Dialogue Box

Edit	Retrieve	Save	Print	Options	Quit
------	----------	------	-------	---------	------

Sort Records

Name	Order
1. LNAME	A
2. FNAME	A
3.	A
4.	A
5.	A
6.	A

for ascending. This tells the KEYPUNCH program to sort numbers from low to high values, and to sort strings from A to Z. You may change the direction to "D," for descending, to reverse the direction of the sort. Then press Enter again to move the highlight bar down to the next sorting level.

If you do not remember the name of the question you want to use in a sort, you may press the F4 key to display a list of all the questions in the questionnaire. Highlight the name of the question you want to use, and then press the Enter key to automatically fill in the name in the Sort dialogue box.

You can begin sorting by pressing the Enter key until the highlight bar moves past the last input field in the Sort Records dialogue box, or by pressing Ctrl-Enter. You can move the highlight bar back to a previous field by pressing the left arrow key or cancel the function by pressing the Escape key.

In the example above, a two-level sort has been entered that will sort all the records, first by the respondent's last name (LNAME), and then by their first name (FNAME). If all the respondents have different last names, the second level of the sort will never be used. If any respondents have the same last name, however, the records will be sorted according to their first names.

In order to complete a sort, you must have an amount of free disk space that is equal to or greater than the size of your data file. The Sort function will give your original data file a new file name extension, "DA!," and then copy each record in sorted order to a new version of your data file.

After you start the sort, a message box will be displayed on the screen that tells you it is creating a sorted index of the records. After it has done this, a new message box will be displayed that shows how many records have been copied to a new sorted data file. If you stop the sort, by pressing the Escape key, the sorted file will be abandoned and the original unsorted file will be recovered.

Print Menu

You can get a hard copy of the record you see on the screen using the Print menu. Printed copies of records are useful for reviewing or verifying the data. Since the printed responses will be formatted like the original questionnaire, the data entry can be quickly checked against the originals.

After you select Print from the main menu, the various printing functions and options will be displayed in a drop-down menu. You can use the functions to tell the KEYPUNCH program which records to print, and you can use the options to tell it how and where to print them. You must set any options you want to use before you begin printing records.

Print Menu

Edit Retrieve Save Print Options Quit	
	Current record in memory F5
	All records F6
	By numeric search
	By string search
	Format options
	Page size options
	»Parallel printer 1
	Parallel printer 2
	Parralel printer 3
	Print to file
	Append to end of file
	Printer setup codes

The record will be printed just as it appears on the screen, except that the text of each question can be added between the variable name and number, and the answer. Subtitles may also be printed if the questionnaire author has used them to separate groups of questions. The following example shows how a record would be printed using the default options.

Example

```
A:\TEST1.DAT                               Page: 1
7-2-1996  1:26:54 p.m.                     Record: 4

                                QPL Demonstration
                                Version 4.0
                                Current Record in Memory

NAME          | ANSWER
=====
 1:VRSN       | 01
 2:INDATE     | 07-02-1996
 3:INTIME     | 1:21 p.m.
 4:TTL        | Press ENTER to begin...
 5:M1         | Yes, continue with demonstration
 6:C1         | 1, 2, 3
 8:R1        | Jump to path A
 9:V1         | Press ENTER to continue...
11:N1        | 66
14:N2        | $ 22.00
16:S1        | This is a long string field
17:S2        | State: MN ZIP Code: 55110
18:O1        | 006601--.OTX
19:D1        | 10-09-1956
20:D2        | 12,684 days
21:D3        | Press ENTER to continue...
22:FINISH    | Save answers
24:ENDTIME   | 1:23 p.m.
```

Current Record in Memory

Selecting the “Current record in memory” function tells the KEYPUNCH program to print the record currently displayed on the screen. You can tell the KEYPUNCH program to stop printing the record by pressing the Escape key.

All Records

You may print all of the records in the data file by using the “All records” function. When you select this function, a dialogue box will be displayed in the middle of the screen that shows which question and record it is currently printing. Press the Escape key to stop printing. The print menu will be displayed again after all of the records have been printed.

By Numeric Search

You can print only selected records using the “By numeric search” function. This function is similar to the Retrieve menu numeric search function. When you select this function, a dialogue box will be displayed in the middle of the screen that asks you to enter a search expression. Only the records that meet these criteria will be printed.

Example

```
Q1 = 1 AND #8 > 20000
```

In this example, all the records in which the answer to question Q1 is 1 and the answer to question number 8 is greater than 20,000. All other records will be skipped. You can also use the RECORD keyword to print records according to their record number. If you do not know the name of question, you may press the F4 key to display a list of the question names. Highlight the one you want to use and then press the Enter key to copy the name to the Print By Numeric Search dialogue box.

Example

```
RECORD <= 10
```

The expression in this example tells the KEYPUNCH program to only print the first 10 records in the data file. (Note: This function always begins scanning the data file at the first record, regardless of what record is currently in memory.)

After you have entered an expression, press the Enter key to begin printing records. A dialogue box will be displayed in the middle of the screen that shows what question and record is currently being printed. Press the Escape key to stop printing. The Print menu will be displayed after all the matching records have been printed.

By String Search

You may instead tell the KEYPUNCH program which records to print by specifying a string match. In this case, only records that have a phrase that matches the phrase you specify will be printed. This function is similar to the Retrieve menu string search functions. When you select this function, a dialogue box will be displayed in the middle of the screen that asks for the name of the question you want to search by and the phrase you want to search for. If you do not remember the name of the question, you can press F4 to display a list of names. Highlight the one you want to search and then press Enter to copy the name to the Print By String Search dialogue box.

The string search function treats upper and lowercase letters equivalently. That is, the phrase "ABC" will match the phrase "abc." Press the Enter key after you have entered a search phrase to begin printing. A dialogue box will be displayed that shows what question and record is currently being printed. Press the Escape key to stop printing. The Print menu will be displayed after all the matching records have been printed.

Format Options

You can modify how the KEYPUNCH program prints records by selecting various formatting options. To display the list of options, highlight “Format options,” and then press the Enter key. A submenu will be display that lists all of the options. You may check an option by first highlighting it and then pressing the Enter key. A check mark next to the option name indicates that it has been selected. You can turn an option off by highlighting it and pressing Enter again. After you have selected all the options you want to use, press the Escape key or the left or right arrow keys to close the submenu.

Print Format Options Submenu

Edit Retrieve Save Print Options Quit	
	Current record in memory F5 All records F6 By numeric search By string search
	Format options
<input checked="" type="checkbox"/>	Include skipped questions
<input type="checkbox"/>	Show first line of question
<input type="checkbox"/>	Insert subtitles
<input type="checkbox"/>	Show each checked response
<input type="checkbox"/>	Wrap long string responses
<input type="checkbox"/>	Show open ended responses
<input type="checkbox"/>	Use askSam format

Include Skipped Questions

Normally, the KEYPUNCH program does not print questions that were not answered according to the skip instructions. This is generally useful because it greatly shortens the time needed to print a record, and it makes it easier to see which questions were asked. You can, however, tell the KEYPUNCH program to print the answers to all of the questions, including the ones that were skipped, by checking the “Skipped questions” option. The answers to these questions will be displayed as ellipses (*i.e.*, “...”), indicating that the respondents were not asked these questions.

Show First Line of Question

The text of each question will not be printed unless you check the “Show first line of question” option. Omitting the question text can greatly shorten the time it takes to print a record. If you check this option, approximately the first 40 characters of each question will be printed in between the question number and variable name, and the answer.

Insert Subtitles

If the questionnaire author used subtitles to label groups of questions, you can print them if you check the “Insert subtitles” option. Although using this option makes the list longer, it should make the list easier to read.

Show Each Checked Response	Normally, answers to check-all-that-apply questions are printed as a list of numbers that indicate which answers were selected, or the word “None,” if no answers were selected. You may instead use this option to tell the KEYPUNCH program to print the full text of each answer that was selected. Each answer will be printed on a separate line.
Wrap Long String Responses	Answers to string questions can sometimes be longer than answer column in the printed record. The KEYPUNCH program will truncate the answer to fit within this column unless you select this option, which tells it to use as many lines as necessary to print the entire answer.
Show Open-Ended Responses	The responses to open-ended questions can be very long, and they may exceed several paragraphs or more in length. By default, the KEYPUNCH program only prints the name of the file where the response to an open-ended question has been stored. This file always has an “OTX” extension and is located on the same disk and in the same directory as your data file. ⁷ You can tell the KEYPUNCH program to print the entire contents of this file by selecting this option.
Use askSam Format	<p>This formatting option is different from the others because it is intended to be used to create a text-based data file that can be used with the askSam software package. askSam describes itself as a “free form information management environment.” This option formats the data file so that you can immediately use it with askSam’s text-retrieval, hypertext, and other text-manipulation functions.⁸</p> <p>You can still use the other formatting functions to modify how this file is created. In order to get the best use from askSam, you also should check the</p> <ul style="list-style-type: none">• Include skipped questions,• Show each checked response,• Wrap long string responses, and• Show open-ended responses options. <p>You should not check the option to show the first line of the question text because this makes it difficult to use askSam’s field names (<i>i.e.</i>, the names of the</p>

⁷You should not use OTX files with WordPerfect or another word processing program. They contain internal formatting codes that are unique to QPL. Instead, you should use the CONVERT program to translate them into generic word processor files. See chapter 12, *QPL Reference Manual Version 4.0*.

⁸The QPL CONVERT program also can convert data files to an askSam import format. It provides more control over how an askSam file is created than KEYPUNCH. CONVERT allows you to specify which responses and respondents are included in the askSam file. See chapter 12, *QPL Reference Manual Version 4.0*.

questions with “[” characters appended on the right) in field-specific searches and extractions.

Checking the askSam option also changes the output destination from your printer to a file. On the main Print menu, the “Print to file” option will be checked instead of “Parallel printers.” Later, you can import this text-based data file into askSam using its ASCII and Document mode options, and by telling it that “@@” characters mark the end of documents (*i.e.*, QPL records).⁹

After you have selected all of the formatting and file options, you can use the printing functions at the top of the menu to copy all or the records, or just some of the records, to the text file. You do not have to copy all the records at once. If you check the “Append to end of file” option, new records will be appended to the end of the KTX file when you use a printing function.

Page Size Options

If your printer can use paper that is larger than the standard 8½ by 11-inch page, or you know how to program the printer so it will use smaller type, you can use “Page size options” to tell the KEYPUNCH program to print more of the report on each page.¹⁰

To change the default options, highlight “Page size options” on the Print menu and then press the Enter key. A submenu will be displayed that shows all of the options. The check marks indicate which options are currently set. You may change an option by first moving the highlight bar to the one you want to use and

Print Page Size Options Submenu

Edit	Retrieve	Save	Print	Options	Quit
				Current record in memory F5 All records F6 By numeric search By string search	
				Format options Page size options	
				»80 column page 132 column page 176 column page 220 column page	
				»60 lines per page 80 lines per page Do not break pages	

⁹For more information on importing files into askSam, see chapter 12, *QPL Reference Manual Version 4.0*.

¹⁰See also discussion of “Printer setup codes” function.

then press the Enter key. The check mark will move to the option you selected. Press the Escape key or left or right arrow keys to close the submenu and go back to the Print menu.

80-, 132-, 176-, or 220-Column Page

The KEYPUNCH program normally formats the record listing to print on an 80-column page (*i.e.*, 8½ by 11-inch page). You may use a wider page by selecting a 132-, 176-, or 220-column page option. More of the question text and answers can be displayed when you use one of the wider page settings.

60- or 80-Line Page or No Pages

You also may change the number of lines that will be printed on one page. Most printers are set, by default, to print 6 lines per inch, or 66 lines per 11-inch page. The KEYPUNCH program will print up to 60 lines before starting a new page. If your printer can print 8 lines per inch, or 88 lines per 11-inch page, you can tell the KEYPUNCH program to print up to 80 lines before starting a new page. Or you may check the last option to tell the KEYPUNCH program not to break the report into pages. In this case, each record will be started on a new page but it may run longer than the page.

Parallel Printers or File

The KEYPUNCH program is initially set to print record listings on a printer that is attached to the first parallel port on your computer. (Note: The questionnaire author may have reset the default printer to another port.) If your printer is not ready, an error message will be displayed on the screen. Press any key to clear the error message and return to the Print menu.

You may switch to a different printer by checking a different printer port. Parallel printer 1 corresponds to LPT1:, printer 2 is LPT2:, and so on.

You may instead print the reports to a text file on a disk by checking the “Print to file” option. This option is often used to create an askSam text-based data file. After you select one of the printing options at the top of the menu, a dialogue box will be displayed that asks for the name of the file that you want to create. By default, it will suggest a name that is the same as your questionnaire file, but has a new extension, KTX, to indicate that it is a KEYPUNCH text file. You may change this name if you desire. When ready, press the up or down arrow keys to highlight the “Begin” option to start printing the report to the disk file, or highlight the “Cancel” option to exit back to the Print menu.

Append to End of File

The Append option only takes effect when the “Print to file” option is checked. Normally, an existing file will be overwritten when printing a new report to a file of the same name. Checking the “Append to end of file” option tells the KEYPUNCH program to add a new report to the end of an existing file of the same name.

Printer Setup Codes

Normally, you should not have to do anything special to make the KEYPUNCH program work with your printer. Since it only sends standard ASCII character and carriage control codes to the printer, it should work with any printer that supports ASCII codes. You may, however, use this function to change the character font and pitch, line size, or other features your printer offers. If you increase the number of characters and lines per inch, for example, you can print more of the questionnaire record on each page, and therefore use less paper to print a complete report.

When you select the “Printer setup codes” function, a dialogue box will be displayed in the middle of the screen that asks for setup and reset control code strings. Most printers are programmed using control codes or escape sequences.

Printer Setup Codes Dialogue Box

```

Edit  Retrieve  Save  Print  Options  Quit
-----
Enter printer setup string:
  \027@\027\015\027\048
Enter printer reset string:
  \027@_

```

Consult your printer’s manual for the specific codes it uses. The KEYPUNCH program will send the setup string you enter to your printer before it starts printing the report to initialize your printer. After the report is finished, it will send the reset string to return the printer to its default settings.

Type control code numbers using a backslash and then the number of the code (as a three-digit decimal number, using leading zeros if necessary). For example, to send an escape code (27) to the printer, you should type “\027” in the setup string.

You also may use ASCII characters to represent control code numbers. For example, Epson printers are programmed using escape sequences. These sequences begin with the escape code, followed by one or more character codes that specify what to change. To tell an Epson printer to reset all of its options to the factory defaults, you could enter “\027@” or “\027\064.” Since the @ character has an ASCII value of 64, both of these strings send the same codes to the printer.

Generally, using the ASCII characters makes the code strings shorter to write and a little easier to read. Since upper and lowercase letters have different ASCII values, however, you must be careful to type characters exactly as shown in your printer manual. Do not type any spaces between the codes and letters unless your printer manual says to do so.

Printer Initialization Files

The printer setup and reset strings you write can be saved in a file so that they may be automatically reloaded the next time you start the KEYPUNCH program. The current page size settings (*i.e.*, the number of columns and lines per page) also will be saved in this file. After you have finished entering both the setup and reset strings, another dialogue box will be displayed that asks if you want to save the strings in a file. If you answer “Yes,” your strings and the page dimensions will be written to a file called “QPLPRINT.INI” on the same disk and in the same directory as your QPL program.

Several printer initialization files have been included on the QPL Master Program Disk. They are listed in the table below.

Printer Initialization Files on QPL Master Program Disk

EPSON.INI	Sets print for 132 columns and 80 lines per page for Epson FX and LQ series printers.
HPLJIICL.INI	Sets print for 176 columns and 60 lines per page in landscape mode for Hewlett-Packard LaserJet Series II (and later) printers and compatibles.
HPLJIICP.INI	Sets print for 132 columns and 80 lines per page in portrait mode for Hewlett-Packard LaserJet Series II (and later) printers and compatibles.
IBMPRO.INI	Sets print for 132 columns and 80 lines per page for IBM ProPrinters and compatibles.
OKIDATA.INI	Sets print for 132 columns and 80 lines per page for Okidata Microliner 82A and 93 dot matrix printers.

QPL printer initialization files are simple ASCII text files. You may view or edit these files using the DOS EDIT program or your word processor. Lines that begin with an asterisk are comments. The first non-comment line must be the setup string, the second line must be the reset string, and the third line must contain the number of columns and the number of lines per page.

Example — EPSON.INI

```
*
* EPSON.INI      - Various Epson printers that are using
*                 the Epson mode including:
*                 FX, FX-80, and FX-286
*                 LQ-850, LQ-950, and LQ-1050,
*                 17 pitch type
*                 8 lines per inch
*
* Set KEYPUNCH page size options to:
*
*                 220 column page (wide paper), or
*                 132 column page (letter-size paper)
*                 80 lines per page
*
\027@\027\015\027\048
\027@
132 80
```

To use one of the printer initialization files, first copy the file you want to use to the disk and directory where your QPL application program is located, and then change the name to “QPLPRINT.INI” (*i.e.*, the default file name). Then, when you start the KEYPUNCH program, this file will be automatically loaded. You may instead tell the KEYPUNCH program the name and location of a particular initialization file by starting it with the /I command line option.

Example — /I Option

```
C:\> KEYPUNCH C:\JOB1\MYJOB.QPL /I:\QPL\EPSON.INI
```

In this example, command line options are used to tell the KEYPUNCH program to load a questionnaire program and a printer initialization file. The questionnaire program is called “MYJOB.QPL,” which is located on the C: drive and in the “JOB1” directory. The /I option tells it to load the printer initialization file called “EPSON.INI,” which is located in the “QPL” directory on the C: drive.

Options Menu

The Options menu has functions that allow you to change how the edit screen is displayed, to turn the control file on or off, and to get a status report that includes the number of records that are currently in the data file.

Options Menu

Edit	Retrieve	Save	Print	Options	Quit
Show question number					
Show variable name					
»Show both number and name					
»Use control data file					
Display system status					F9

Show Question Number or Name

The first three options affect how the questions are labeled on the Edit screen and in printed records. When the KEYPUNCH program is first started, it displays both the number of a question and its variable name on each line of the listing. You can change this display to show just the question numbers by checking the “Show question number” option, or just the variable names by checking the “Show variable names” option.

You may find it easier to display just the question names if you are keying new data that were recorded by hand on a questionnaire or other data collection instrument. (Note: Typically, the questionnaire author will use a naming scheme that makes it easy to identify questions as they were originally numbered in a questionnaire.) If you are editing telephone interview records, you may find it easier to just show the question numbers, since these exactly match the survey instrument.

Use Control Data File

The “Use control data file” option is effective only when the questionnaire author has set up a Control List. A Control List shows what cases have not been entered into the data file or are not complete. You must select one of the cases before you can begin entering data for a new case. After you have selected a case, the KEYPUNCH program will automatically fill in some of the answers on the questionnaire from the control data file. You are not allowed to change the answers to the questions that are automatically filled in.

You can, however, turn the control data file function off when you need to enter a case that was not shown in the Control List. When it is off (*i.e.*, not checked), the Control List will not be displayed after you select the Edit function from the main menu, and you must enter answers for the questions that would have been automatically copied from the control data file.

