12 The HP-16C: A Quick Look

To Compute	Keystrokes	Display
(floating-point decimal)	f FLOAT 4 BSP	0.0000
$-4.9 \div 6$	4.9 CHS ENTER 6	-0.8167
$\sqrt{60}$	$60 \boxed{g} \sqrt{x}$	7.7460

Programmed Solutions

Writing a Program. The HP-16C is keystroke-programmable: you can program it simply by recording the same keystrokes you use to evaluate a problem manually.

Example: Write an iterative program that adds 1 continually to a given number.



Keystrokes	Display*	
g P/R	000-	Sets calculator to Program mode (PRGM annunciator on). Line 000.
f CLEAR PRGM	000-	$Clears\ program\ memory.$
g LBL A	001-43,22, A	Assigns this program label "A".
1	002- 1	Line 002: 1.
+	003- 40	Line 003: adds 1 to whatever is in display when program is run.
f SHOW BIN	004- 42 26	Momentarily pauses and displays binary result.
GTO A	005- 22 A	Continues execution in a loop.

^{*}The display includes line numbers and keycodes. Keycodes are two-digit numbers that indicate the row and column position of the key(s) pressed.

Keystrokes

Display

g P/R

Returns calculator to Run mode; no **PRGM** annunciator. Display will show the result of the last calculation performed.

Running the Program. Key the starting number (for example, zero) into the display. You do not need to use ENTER since starting the program will separate the two numbers to be added. The program above adds 1 to whatever number you key in.

Keystrokes	Display	
DEC		Converts to Integer mode, base 10. (You can start in any number base; the program will display the numbers in binary.)
16 f WSIZE		Sets word size to 16.
0	0 d	Initial number: 0.
GSB A	1 b 10 b 11 b 100 b	Addresses and starts a program with label "A". The momentary displays are binary.
R/S	22 d	Since this is an endless loop, stop program execution with R/S (run/stop). The display shows the decimal equivalent of the binary value at the particular moment you press R/S.

This introduction to the HP-16C should give you a feel for its operation. It is only a glimpse, however; for a look at the dozens of other powerful HP-16C functions, turn the page and explore Part I, HP-16C Fundamentals.