

STEP	KEY ENTRY	KEY CODE
1	* LBL D	21 14
	RCL A	36 11
	f CLF 3	16 22 03
	DSP 1	-63 01
5	RTN	24
	GTO E	22 15
	LBL f a	21 16 15
	f F7 3	16 23 03
	GTO f a	22 16 11
10	* LBL 3	21 03
	GSB 0	23 00
	LBL 1	21 01
	GSB 2	23 02
	STO (i)	35 45
15	f DSZ 1	16 25 46
	GTO 1	22 01
	0	00
	STO 0	35 00
	STO 6	35 06
20	STO A	35 11
	DSP 0	-63 00
	RTN	24
	GTO E	22 15
	* LBL 0	21 00
25	5	05
	STO 1	35 46
	RTN	24
	* LBL 2	21 02
	RCL 9	36 09
30	f Pj	16-24
	+	-55
	X <sup>2</sup>	53
	f FRC	16 44
	STO 9	35 09
35	8	08
	9	09
	x	-35
	f INT	16 34
	-	-62
40	1	01
	x	-35
	1	01
	-	-62
	1	01
45	+	-55
	f INT	16 34
	f LSTx	16-63
	f X=Y?	16-33
	GTO 2	22 02
50	RTN	24
	* LBL A	21 11
	STO 8	35 08
	1	01
	0	00
55	+	-24
	STO A	35 11
	f FRC	16 44
	f X=0?	16-43
	GTO D	22 14
60	RCL 8	36 08
	1	01
	1	01
	f X>Y?	16-34
	GTO D	22 14
65	CLx	-51
	9	09
	9	09
	-	-45
	f X>0?	16-44
70	GTO D	22 14
	0	00
	STO 7	35 07
	GSB 0	23 00
	* LBL 4	21 04
75	GSB 5	23 05
	f DSZ 1	16 25 46
	GTO 4	22 04
	1	01
	STO + 0	35-55 00
80	RCL 7	36 07
	DSP 0	-63 00
	f CLF 3	16 22 03
	RTN	24
	GTO E	22 15
85	* LBL 5	21 05
	RCL (i)	36 45
	RCL A	36 11
	f X=Y?	16-33
	GTO 6	22 06
	-	-45
	f ABS	16 31
	1	-62
	1	01
	X2Y	-41
95	f X=Y?	16-33
	GTO 7	22 07
	1	01
	-	-45
	f ABS	16 31
100	f X=Y?	16-35

STEP	KEY ENTRY	KEY CODE
101	GTO 7	22 07
	RTN	24
	* LBL 6	21 06
	1	01
105	CHS	-22
	STO x(i)	35-35 45
	1	01
	STO + 6	35-55 06
	RCL 7	36 07
110	2	02
	f X=Y?	16-35
	+	-55
	STO 7	35 07
	RTN	24
115	* LBL 7	21 07
	1	01
	RCL 7	36 07
	f X=Y?	16-35
	X2Y	-41
120	STO 7	35 07
	RTN	24
	* LBL 8	21 12
	5	05
	RCL 6	36 06
125	f X=Y?	16-32
	GTO 8	22 08
	SCI	-12
	1	01
	STO C	35 13
130	DSP 1	-63 01
	GSB 0	23 00
	* LBL 9	21 09
	RCL (i)	36 45
	CHS	-22
135	RCL C	36 13
	1	01
	0	00
	x	-35
	STO C	35 13
140	x	-35
	f PAUSE	16 51
	f PAUSE	16 51
	f DSZ 1	16 25 46
	GTO 9	22 09
145	FIX	-11
	* LBL C	21 13
	RCL 0	36 00
	DSP 0	-63 00
149	f CLF 3	16 22 03
150	RTN	24
151	GTO E	22 15
	* LBL 8	21 08
	DSP 0	-63 00
	RTN	24
155	GTO E	22 15
	* LBL f a	21 16 11
	1	01
	f X>Y?	16-34
	GTO f b	22 16 12
160	Ri	-31
	RTN	24
	GTO E	22 15
	* LBL f b	21 16 12
	Ri	-31
165	STO 9	35 09
	GTO 3	22 03
170		
175		
180		
185		
190		
95		
100		

1. SUB HUNT - FIVE SUBS BY: JACOB R. JACOBS 99  
 2. Modified BY: CHARLES C. CAMPBELL 1605

Revised April 27, 1977

1

SEED? START

2

1

SUB HUNT - FIVE SUBS

67/97

2

1

FIRE

SUBS SUNK

SHOTS

LAST SHOT

ERROR

2

1

2

STEP	INSTRUCTIONS	INPUT DATA/UNITS	KEYS	OUTPUT DATA/UNITS
1	Enter Program (both sides)			
2	(Optional) Input SEED: any random number as a decimal fraction, eg: .93184271, then START	SEED	f E	0.
2	OR START		f E	0.
3	Input a trial coordinate as "RC", where R= row number and C= column number, then FIRE	RC	A	NOTE 1
4	(Optional) To see number of shots fired		C	# SHOTS
5	(Optional) To see last RC fired upon		D	R,C
6	(Optional) To see the number of subs sunk or the location of the five subs after they are sunk		B	NOTE 2
7	Go to step 3 until all the subs are found and sunk.			
8	To start a new game, go to step 2.			
	See game board with four 9x9 grids. Place in a 8 1/2 x 11 inch acetate paper holder made for a 3 ring binder and keep game clues thereon with a grease pencil, which can be erased with a rag.			

NOTES:

1	"0," means no sub(s) in square nor in the adjoining squares, including the diagonal squares.
	"1," means a sub(s), not already sunk, is in an adjoining square(s), including the diagonal squares.
	"2," or "4," or "6," or "8," or "10," means a direct hit on 1 or 2 or 3 or 4 or 5 subs within the square fired upon, and the sub(s) are sunk.
2	At step 6 the number of subs sunk will be displayed. If all five subs are sunk, the R,C location of each of the five subs will be displayed during a pause, then the program stops with the number of shots fired, displayed.
3	"error" will be displayed if R/S is pushed after steps 2,3,4,5, or 6.
4	The program does not use the 97 printer and is therefore a 67 program with 97 codes shown hereon.

STEP	KEY ENTRY	KEY CODE
201		
205		
210		
215		
220		
224		

Registers

0 # shots	1 sub 1	2 sub 2	3 sub 3	4 sub 4
5 sub 5	6 # sunk	7 hit code	8 used	9 seed

0	1	2	3	4
5	6	7	8	9

A last shot

B used

C used

D

E

F used

Labels

A fire	B subs sunk	C # shots	D last shot	E error stop
a used	b used	c	d	e seed/ start
0 used	1 used	2 used	3 used	4 used
5 used	6 used	7 used	8 used	9 used

Flag Set Status

0	1	2	3
			used

clear

This game is played on a 9x9 grid, with rows and columns numbered 1 thru 9.