May 25, 1983

Mr. Robert Fabris 3626 Morrie Drive San Jose, CA 95127

Dear Mr. Fabris:

Please enter my enclosed program in the next Arcadian program contest. The program is a game called Treasure Hunt and is compatible with both Bally Basic and Astro Basic. Complete instructions are enclosed along with a listing and a tape. The tape has two copies of the program, one on each side. Since I have not yet invested in an Astro Basic cartridge (after five years, I am <u>still</u> waiting for the ZGrass keyboard), I have recorded the programs with the old Bally Basic interface and the Bally Basic cartridge.

I certify that the program titled "Treasure Hunt" is the product of my own efforts and is not a copy of an available program, signed, and ...

Sincerely Yours,

Scott Walpale

Scott Walpole

Address: 11480 Beirut Court #204 St. Louis, MO 63126

TREASURE HUNT by Scott Walpole

"Treasure Hunt" is played on a 9x15 grid. Hidden under the squares in the grid are objects randomly placed by the computer at the beginning of the game. Each player, in turn, selects one square by moving the marker with the joystick and uncovers it by pulling the trigger of his hand control. The object of the game is to first find four hidden "keys" represented by the numbers 1, 2, 3, and 4. After finding the keys, the treasure will be "unlocked", and the player who finds it will score 500 points.

Enter the number of players (from 1 to 4) at the beginning of the game when the "P" appears in the upper left corner of the screen. Player 1 begins by uncovering a square. Under each square is an object that may help or hinder your search for the keys. These objects are described in the table below. The four keys must be found in numerical order, from 1 to 4, before you can get the treasure.

The winner is the player who has the highest score at the end of the game. The game ends when the treasure is found.

OBJECT	DESCRIPTION	SCORE	NUMBER OF OCCURENCES
Number (1-4)	The numbers one through four are the four keys to the treasure. These must be found in numerical order. After the keys are found, they will remain uncovered.	250	1 Each
\$	The dollar sign is the treasure which can only be found after the four keys have been found.	500	1
#	This symbol represents either a key or the treasure not found in proper sequence.	20	•
С	This is one of the three clues to help you find the keys and the treasure. When found, an arrow will appear pointing in the direction of the next key in sequence. If it points up or down, the key is somewhere in one of the rows it points to. If it points left or right, the key is in the same row in the direction of the arrow. For example	25	20
	1 2 3 4an arrow pointing down in row 2 means the key can be found in row 3 or 4. an arrow pointing left means the key can be found in the same row to the left of the arrow.		
R	This clue allows you to reveal what is hidden in an entire row or column. When found, the computer will ask "Direction?" and you must indicate with the joystick what part of the intersecting row or column you want revealed. For example, if you move the joystick to the right, the row from the point of your marker to the right end of the row will be briefly uncovered one square at a time.	40	10
?	This clue, when found, briefly reveals what is hidden under five randomly selected squares.	30	15
F	Free turn.	10	15
L	Lose your next turn. These will not move to a new to a new square when found. If your score is reduced to zero you will not lose a turn.	- 50	10
В	Bonus points.	50	10
Blank	No function.	5	50

OTHER FEATURES:

Moving Objects: All objects move to a new square after being found, leaving the previously occupied square blank. The only exceptions are the keys, the treasure, and the lose-a-turn symbol which remain in one place throughout the game.

Double Score: When "2X SCORE" appears, all point values will be doubled for the next round. Solitaire: One player can play alone trying to score as few points as possible.

PROGRAMMING INSTRUCTIONS

space. To load the program on tape, use the following command-The memory size should be 289 when your finished. It must be at least 288 to conserve string BC=8; FC=135; NT=1; RUN ". Enter the program exactly as shown; do not include any unnecessary spaces or quote marks. Start your recorder, then press GO. :PRINT ;LIST ;PRINT ":RETURN

"TREASURE HUNT"

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360
                                                                                                                                                                                                                 350
                                                                                                                                                                                                                                                                                           310
                                                                                                                                                                                                                                           340
                                                                                                                                                                                                                                                                   330
                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                         280 ⊕(C)=R;NEXT E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GOSUB 2; IF @(C)#32GOTO 220
                      A=A+J; B=B-K; IF (A<0)+(A>14)+(B<0)+(B>8)S=40;
                                             T=2; GOSUB 5; IF W#2GOTO 440
                                                                                                                                                                                                                                                                                                                                                                GOSUB 8; D=D+1; IF D>P D=1; M=1; IF RND (9)=9M=2;
                                                                                                                                                                                                                                                                                                                                                                                                               IF E>53R=66; IF E>63R=76; IF E>73R=70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLEAR ; INPUT P; D=0; N=49; GOTO 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NEXT E; FOR E=-40TO 32STEP 9; FOR F=-81TO 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CX=Ax10-71; CY=32-Bx9; GOTO 6
                                                                      IF TR(D)=OGOTO 330
                                                                                                                                            IF PX(Xx10-75, 35-Yx9)=0X=A; Y=B; GOTO 330
                                                                                                                                                                                               IF Y>8Y=0
                                                                                                                                                                                                                                                                                       W=0;S=5;GOSUB 9;GOTO 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                R=67; IF E>23R=63; IF E>38R=82; IF E>48IF E<54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FOR E=0TO 143;@(E)=32; IF E>139@(E)=0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CY=40; CX=-71; PRINT "PLAYER", #2, F-139, ; PRINT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CY=40; BOX 0,40,160,8,2; RETURN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FOR L=1TO 750; NEXT L; REJURN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CX = Xx10 - 71; CY = 32 - Yx9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C=Bx15+A; RETURN
                                                                                            STEP 2; BOX CX, CY, E, E, 3; MU="5"; NEXT E
                                                                                                                    'L=1;GOSUB 4; A=X; B=Y; GOSUB 5; FOR E=2TO 6
                                                                                                                                                                    IF A=XIF B=YGOTO 390
                                                                                                                                                                                                                      IF Y≼OY=8
                                                                                                                                                                                                                                           IF X>14X=0
                                                                                                                                                                                                                                                                 X=X+JX(D);Y=Y-JY(D);IF X<0X=12
                                                                                                                                                                                                                                                                                                                F=139+D; IF @(F)<00(F)=-0(F); GOTO 290
                                                                                                                                                                                                                                                                                                                                                                                                                                       H=E; (86+E)=C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FOR E-4TO 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STEP 10; BOX F, E, 8, 8, 1; NEXT F; NEXT E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BOX CX, CY, 8, 8, T; RETURN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \Delta = RND (15) - 1; B = RND (9) - 1
                                                                                                                                                                                                                                                                                                                                       CX=-24; PRINT "2X SCORE", ; GOSUB 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "SCORE: ", ABS(@(F)); REPURN
                                                                                                                                                                                                                                                                                                628
                                                                                                                                                                                                                                                                                                                                                                                             620
                                                                                                                                                                                                                                                                                                                                                                                                                     610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         580
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                              632 IF G>Z TV=97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   510 TV=R
                                                                                                                                                                                                                                                                                                                                                                                                                  GOTO 420
                                              FOR D=1TO P; F=139+D; GOSUB 8; CY=40; CX=-27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           T=1;GOSUB 4
                                                                     T=1;GOSUB 5;GOTO 290
                                                                                                                                                                                                                                                                    IF G<Z TV=95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IF R=66S=50
GOSUB 7; NEXT D; GOTO 700
                     PRINT "GAME OVER", ; GOSUB 7; GOSUB 9;
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660 @(C)=R;@(H)=32
                                                                                                                          640 R=@(H);IF (R>48)x(R<54)+(R=76)GOTO 670 650 GOSUB 2;IF @(C)#32GOTO 650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 590 W=2; CX=-30; GOSUB 8; PRINT "DIRECTION?
                                                                                                                                                                                                                                                                                                                                                                                                                                                 600 J=JX(D);K=JY(D);IF J=OIF K=OGOTO 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    520 IF W<2GOTO 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 500 IF R=53TV=36;S=500;GOTO 520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             470 IF R=NIF W=OW=1; N=N+1; S=250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           550 H=C; IF R=70S=10; D=D-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          450 GOSUB 3; R=@(C); IF (R<49)+(R>53)GOTO 510
                                                           \otimes(F)=\otimes(F)+SxM;IF W=4IF \otimes(F)>0\otimes(F)=0
                                                                                                                                                                                                                                                                                                                         T=2;GOSUB 5;I=@(86+N)+15;G=RM;V=H+15;Z=RM;
GOSUB 9; GOSUB 7; IF W=1X=X-1; A=X; GOTO 290
                                 IF N=54GOTO 700
                                                                                                                                                                                                                                                          IF I>V TV=96;GOTO 640
                                                                                                                                                                                                                                                                                                                                                          IF R#67GOTO 640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IF R#82G0T0 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IF R=76S=50; W=4; \omega(F)=-\omega(F); CX=-32; GOSUB 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IF W=3NEXT E;S=30;GOTO 640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IF W=2GOTO 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IF R>481F R<541F R<NGOTO 535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IF R>N TV=35;S=20;GOTO 520
                                                                                                                                                                                                                                                                                                                                                                                    IF R=63IF W=0W=3;GOTO 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRINT "LOSE A TURN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IF W=3FOR E=1TO 5;GOSUB 2;T=2;GOSUB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               T=2;GOSUB
                                                                                                                                                                                                                                                                                         S=25; IF I V TV=94; GOTO 640
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1 CLEAR ; INPUT P; D=0; N=49; GOTO 200
 2 A=RND (15)-1;B=RND (9)-1
 3 C=Bb15+A; RETURN
 4 CX=Ab10-71;CY=32-Bb9;GOT0 6
 5 CX=Xb10-71;CY=32-Yb9
 6 BOX CX,CY,8,8,T;RETURN
 7 FOR L=1TO 750; NEXT L; RETURN
 8 CY=40; BOX 0,40,160,8,2; RETURN
  9 CY=40; CX=-71; PRINT "PLAYER", #2, F-139, ; PRINT " SCORE: ", ABS(@(F)); RETURN
ZØØ FOR E=ØTO 143;@(E)=3Z;IF E>139@(E)=Ø
210 NEXT E;FOR E=-40TO 32STEP 9;FOR F=-81TO 69STEP 10;BOX F,E,8,8,1;NEXT F;NEXT
E:FOR E=4T0 88
220 GOSUB 2; IF @(C)#32GOTO 220
230 R=67; IF E>23R=63; IF E>38R=82; IF E>48IF E<54R=E;@(86+E)=C
250 IF E>53R=66; IF E>63R=76; IF E>73R=70
280 @(C)=R; NEXT E
290 GOSUB 8; D=D+1; IF D>P D=1; M=1; IF RND (9)=9M=2; CX=-24; PRINT "2X SCORE", ; GOSUB
300 F=139+D; IF @(F)<0@(F)=-@(F); GOTO 290
310 W=0;S=5;GOSUB 9;GOTO 375
330 X=X+JX(D);Y=Y-JY(D);IF X<0X=14
340 IF X>14X=0
350 IF Y<0Y=8
360 IF Y>8Y=0
370 IF A=XIF B=YGOTO 390
375 IF PX(Xb10-75,35-Yb9)=0X=A;Y=B;GOTO 330
380 T=1;GOSUB 4;A=X;B=Y;GOSUB 5;FOR E=2TO 6STEP 2;BOX CX,CY,E,E,3;MU="5";NEXT E
390 IF TR(D)=0G0T0 330
400 T=2;GOSUB 5; IF W#2GOTO 440
420 A=A+J;B=B-K;IF (A<0)+(A>14)+(B<0)+(B>B)S=40;GOTO 640
430 T=2; GOSUB 4
440 IF W=3FOR E=1TO 5; GOSUB 2; T=2; GOSUB 4
450 GOSUB 3;R=@(C); IF (R(49)+(R)53)GOTO 510
470 IF R=NIF W=0W=1; N=N+1; S=250
480 IF R>N TV=35; S=20; GOTO 520
500 IF R=53TV=36; S=500; GOTO 520
510 TV=R
520 IF WK2GOTO 550
525 IF R>48IF R<54IF R<NG0T0 535
530 T=1; GOSUB 4
535 IF W=2G0T0 420
540 IF W=3NEXT E;S=30;GOTO 640
550 H=C; IF R=70S=10; D=D-1
560 IF R=76S=50; W=4; @(F)=-@(F); CX=-32; GOSUB 8; PRINT "LOSE A TURN
570 IF R=66S=50
580 IF R#82GOTO 620
590 W=2; CX=-30; GOSUB 8; PRINT "DIRECTION?
600 J=JX(D);K=JY(D); IF J=0IF K=0G0T0 600
610 GOTO 420
620 IF R=63IF W=0W=3;G0T0 440
622 IF R#67G0T0 640
624 T=2;GOSUB 5;I=@(86+N)c15;G=RM;V=Hc15;Z=RM;S=25;IF I<V TV=94;GOTO 640
628 IF I>V TV=96; GOTO 640
630 IF G<Z TV=95
632 IF G>Z TV=97
640 R=@(H); IF (R>48)b(R<54)+(R=76)GOTO 670
650 GOSUB 2; IF @(C)#32GOTO 650
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660 @(C)=R;@(H)=32
670 @(F)=@(F)+SbM; IF W=4IF @(F)>0@(F)=0
 675 IF N=54G0T0 700
676 GOSUB 9; GOSUB 7; IF W=1X=X-1; A=X; GOTO 290
680 T=1; GOSUB 5; GOTO 290
700 FOR D=1TO P;F=139+D;GOSUB 8;CY=40;CX=-27;PRINT "GAME OVER",;GOSUB 7;GOSUB 9
;GOSUB 7;NEXT D;GOTO 700
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