

MINE DODGER

Mine Dodger is a fast-paced, exciting game. The object of the game is to steer ships through mine infested waters, to the land, without hitting a mine. Mine Dodger is what I call a “defensive” game. In other words, instead of making you the agressor, who has to destroy the enemy, you have to avoid the enemy to fulfill the main objective . . . survival.

In Mine Dodger, your ship remains in the same screen area throughout the game, while the background moves past the ship. To make the background move, we make the screen “scroll.”

Scrolling is the effect which you get when you are printing more lines on the screen than the screen can accomodate. The following program illustrates scrolling.

```
10 FORL=1TO10:PRINT"HI":NEXTL
20 PRINT"HITHERE":GOTO10
```

As you can see, the contents of the screen are “pushed up” by new characters being printed at the bottom of the screen. In Mine Dodger, we make the background move by repeatedly printing blank lines.

One last word . . . Mine Dodger is often a difficult game for beginners to play. If you find it too difficult to avoid being blown up, list line 105. Change IFD = 100 to IFD = 50. If the game is still too difficult, change the 50 to 25. These changes wil shorten the distance in which the ship has to travel to reach the land.

VARIABLES

A = Stern of Ship
B = Bow of Ship
D = Distance
LN = Land
SC = Score
N-U = Parts of the Explosion

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10 PRINT "C":POKE36879,110:PRINT "#####MINE DODGER"
12 PRINT "YOU ARE THE COMMANDER OF 10 SUPPLY SHIPS."
14 PRINT "THE SHIPS MUST GET THROUGH MINE-INFESTED WATERS TO YOUR TROOPS."
16 PRINT "YOUR MISSION IS TO AVOID THE MINES WHILE GUIDING EACH SHIP"
18 PRINT "THROUGH THE WATER.":PRINT "PRESS CURSOR CONTROLS TO GUIDE THE SHIP"
20 PRINT "PRESS S TO START"
22 IFPEEK(197)=41THEN40
24 GOTO22

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SET-UP

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40 SH=0:SC=0
45 D=0:IFSH=10THEN500
50 PRINT "C":POKE36879,110:POKE36878,15
60 FORL=1TO23:PRINT:NEXTL
70 A=7898:B=A+22
100 X=INT(RND(1)*22)+0:Y=INT(RND(1)*22)+0
105 D=D+1:IFD=>100THEN700
110 POKE8164+X,81:POKE8164+Y,81:POKE8164+Y+30720,7
120 IFPEEK(197)=31THEN500
130 IFPEEK(197)=23THEN520
140 POKER,160:POKEB,83
150 POKER-22,32:PRINT:IFPEEK(B)=81THEN500
160 GOTO100
500 POKER,32:POKEB,32:A=A-1:B=A+22:IFA=<7878THENA=7878:B=A+22
510 POKER,160:POKEB,83:POKER-21,32:GOTO150
520 POKER,32:POKEB,32:A=A+1:B=A+22:IFA=>7699THENA=7699:B=A+22
530 POKER,160:POKEB,83:POKER-23,32:GOTO150
600 POKER,32:POKE36877,135
610 N=B-23:O=B-22:P=S-21:U=B+1:R=B+23:S=B+22:T=B+21:U=B-1
620 FORM=1TO5:POKER,77:POKEO,66:POKER,78:POKER,64:POKER,77:POKEB,66:POKET,78:POK
EU,64
630 FORV=1TO10:NEXT:N=N-23:O=O-22:P=P-21:Q=Q+1:R=R+23:S=S+22:T=T+21:U=U-1:NEXTM
640 POKE36877,0:SH=SH+1:GOTO45

```

MAIN LOOP

MOVE SHIP LEFT SUBROUTINE

MOVE SHIP RIGHT SUBROUTINE

EXPLOSION SUBROUTINE

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700 LN=8164
710 FORL=1T022:POKELN,160:POKELN+30720.5:LN=LN+1:NEXTL
720 IFPEEK(B)=160THEN750
730 GOTO120
750 PRINT"YOUR SHIP GOT THROUGH!"
760 :FORT=1T03000:NEXT:SC=SC+1:SH=SH+1:GOTO45
800 PRINT"J":POKES679,15:PRINT"SCORE:SC"
810 PRINT"SCORE:SC*10%2OF SHIPS":PRINT"
820 PRINT"PRESS P TO PLAY AGAIN"
830 IFPEEK(137)=13THEN40
840 GOTO630

```

LAND SUBROUTINE

ENDING ROUTINE

10 Clear the screen: Make the screen and border blue: Print in yellow, reversed characters, 5 spaces from the left "MINE DODGER" turn off the reversed characters.

12-20 Instructions

22 If the S key is pressed then go on to line 40

24 Go back to line 22

40 SH (number of ships) is 0: SC (score) is 0.

~~45 D (distance ship has travelled) is 0: If SH equals 10 (if 10 ships have gone by) then go to line 800 (ending routine).~~

50 Clear the screen: Make the screen and border colors blue: Turn the volume on to full.

~~60 Print a blank line 23 times. (the command PRINT by itself will print a blank line).~~

~~70 A (the rear half of the ship) equals screen position 7888: B (the bow of the ship) equals A + 22 (one line below A).~~

~~100 Pick a random number between 0 and 21 . . . this number is represented by X: Pick another random number between 0 and 21 . . . this number will be called Y.~~

~~105 D (distance) is increased by 1: If D equals 100 or more then go to line 700 (land subroutine).~~

~~110 Poke X + 8164 (our random number plus the start of the bottom screen line), 81 (circle): Poke X + 8164 + 30720, 7 (by adding 30720 to any screen location, we get the corresponding color location . . . in this case we poke the circle's color location with a 7 . . . the color yellow): Poke Y (our other random number) + 8164,~~

~~81: Color it yellow also. (When this line is run, we have 2 yellow circles in random positions on the bottom line of the screen).~~

120 If the right hand cursor control key is pressed then go to line 500.

130 If the left hand cursor key is pressed then go to line 520.

140 Poke A, 160 (Block shape): Poke B, 83 (heart shape).

150 Erase the space one line up from A: Print a blank line (this blank line will cause the screen to "scroll" up one line): If a circle (81) appears in position B (the bow of the ship) then go to line 600 (explosion subroutine).

160 Go back to line 100.

500 Erase A: Erase B: A now equals one space to the left: B equals one line below A: A cannot equal less than 7878: B equals one line below A.

510 Poke A, 160: Poke B, 83 (the ship has now been poked into its new position): Erase A - 21 (1 space right and one line up from A's old position): Go back to line 150.

520 and 530 Same as 500 and 510 except that the ship is moved one space to the right.

600 Erase B: Turn on noise speaker with sound #135 (sound of the explosion).

610 Positions of N-U (parts of the explosion)

620 Do the following (sequence M) 5 times: Poke N-U with the shapes specified for each.

630 Time Loop (you may have noticed that we usually use the variable T in a time loop. In this case, part of the explosion has the name "T," so we are using a different time-loop variable (V) so that it won't interfere with the explosion sequence): N-U now equal a space further from B: Next, do sequence M again.

640 Turn off the noise speaker: Number of ships is increased by 1: Go back to line 45.

700 LN (land) equals location 8164.

710 Do the following (sequence L) 22 times: Poke LN, 160 (solid block): Color LN green: LN equals 1 space to the right: Do sequence L again.

720 If the bow of the ship (B) is filled with a value of 160 (the land) then go to line 750.

730 Go back to line 120 (this will take us back to the main loop which lets us control the ship and moves the screen up one space. When we get to line 105 in the main loop, D will equal more than 100, so the computer will go to line 700 again).

750 Self-explanatory.

760 Time loop (approx. 3 seconds): Score is increased by 1: Number of ships is increased by 1: Go back to line 45.

800 Clear the screen: Change the screen color to black, with a yellow border: Print, in yellow, 4 spaces across and 2 down, "SCORE:" followed by the score.

810 Print, 5 spaces down and 6 across, SC*10 (the score, multiplied by 10) "% OF SHIPS GOT THROUGH."

820 Self-explanatory

830 If the P key is pressed, go to line 40 (start the game again).

840 Self-explanatory.