

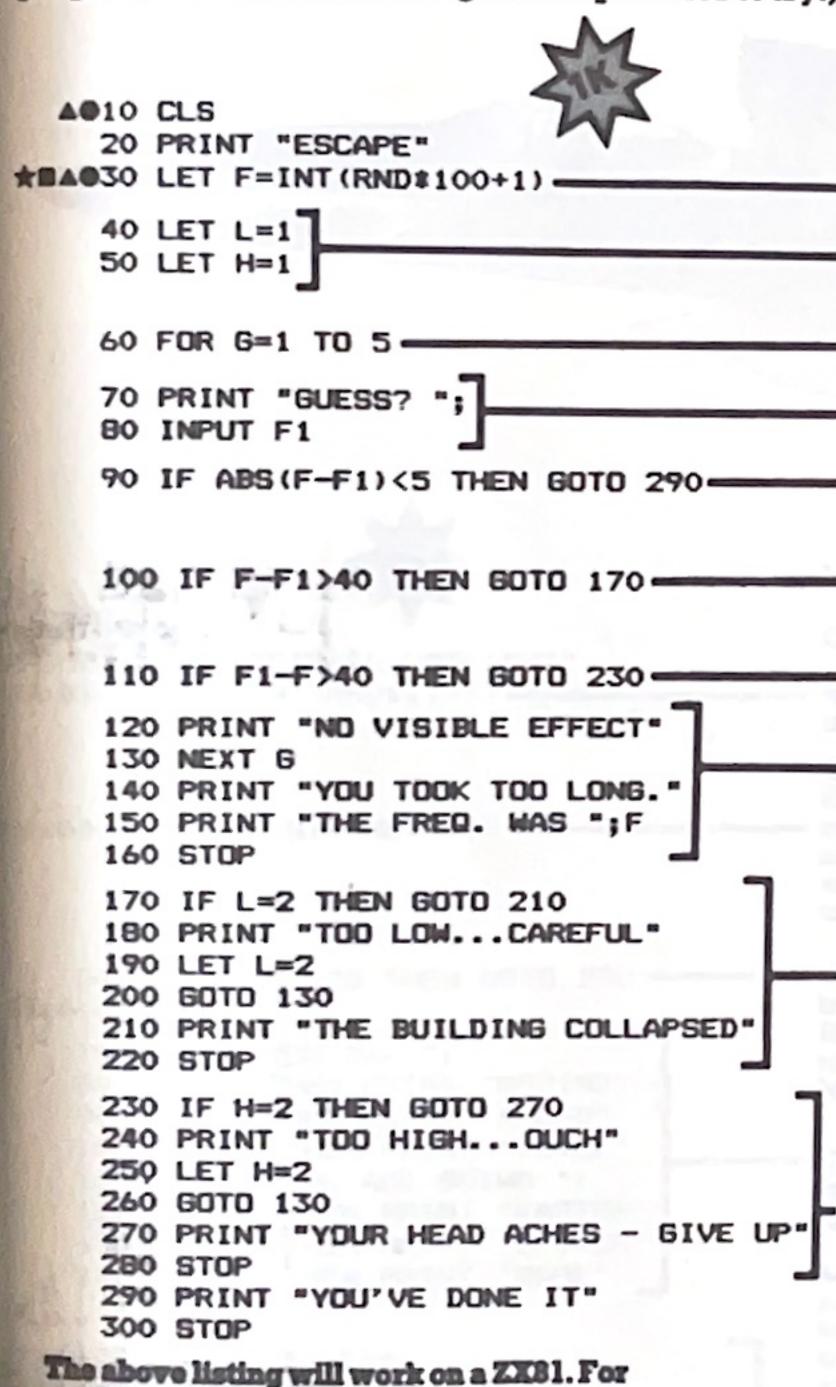
The Robots have caught you, taken your weapons and locked you up. Suddenly you remember you still have your sonar wristwatch, which can be tuned to produce sounds of any frequency. If you can only find the resonant frequency of your Robot guards, they should vibrate so much they fall apart.

You must be careful not to use frequencies that are too low or the building will vibrate and collapse on top of you. If you go too high, you will get such a

terrible headache you will have to give up.

Can you escape the horrors of the Robot prison? (Look carefully at the

program for a clue to the range of frequencies to try.)



other computers, make the changes below.

#A030 LET F=INT(RND(1) #100+1)

#30 LET F=INT(RND(0) #100+1)

A10 PRINT CHR\$ (147)

010 HOME

How the program works

Chooses a number between 1 and 100 for frequency of robots and puts it in F.

Puts I in L and H. These are used if you go too low or too high - see lines 170-190 and

Beginning of loop which allows you to have 5 turns.

Gets a guess from you and puts it in F1.

-Checks if your guess is within 5 of F. If it is, jumps to 290 to print YOU'VE DONE IT.

Jumps to 170 if your guess is so low it is less than F by more than 40.

Jumps to 230 if your guess is so high it is more than F by more than 40

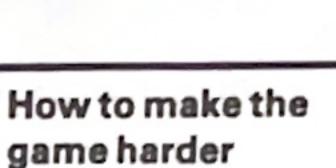
Prints if your guess was within 40 of F and goes back for next turn. If all turns have been used, it prints the answer.

Checks the value of L. The first time this part of the program is reached, L is 1. So the computer moves down the program to print a warning, change L to 2 and go back for another turn. Next time line 170 comes into operation the program jumps straight to 210 to tell you you've lost.

These lines check H in the same way to give you a warning first time you go too high and tell you you've lost the second time.

Puzzle corner

The three Robot guards each have their own resonant frequency. You can't escape until you have found all three. How could you change the program to do this?



Change the 5 in line 90 to a lower number. This means you have to get closer to F to win. You can also increase the possible range of F by changing 100 in line 30 to a higher number.