<u>Task</u>

You have been tasked with apprehending notorious hacker b40m1k3. Although you are not sure exactly where they are, you know that they are residing in the basement of one of the houses on Elmike Street, which has 8 houses in a line.

You have **8** days to catch b40m1k3 after entering the area, but each day, you can only investigate **1** house. Furthermore, you have received intelligence that b40m1k3 is moving between houses using a system of secret tunnels connecting adjacent houses. Each day, he will move to one of the adjacent houses at random.

The HSCTF police department would like to see if you are up to the task, so you will be asked to simulate the operation **200** times. You will pass if you are able to catch b40m1k3 at least **187** times.

Interaction Details:

Before each trial, the grader will output a single line reading "**Trial x:**", where **x** is an integer between **1** and **200**. Internally, b40m1k3 will be set to reside in one of the houses at random. Afterwards, you will be prompted at most **8** times to enter an integer from **1** to **8**. If you have correctly guessed the house number, you will receive a single line reading "**correct**" and the trial will end. Otherwise, you will receive a single line reading "**incorrect**" and will be given another opportunity to guess the house number. Note that between consecutive guesses, b40m1k3 will change houses.

At the end of 200 trials, you will be given the flag if you have succeeded at least 187 times.

Sample Interaction:

Trial 1:
guess: 1
correct
Trial 2:
guess: 1
incorrect
guess: 2
incorrect
guess: 3
incorrect
guess: 4
incorrect
guess: 5
incorrect

guess: 8 incorrect

guess: 6 incorrect guess: 7 incorrect

Trial 3:

etc.