

```
1  //
2  // Created by hengxin on 9/14/23.
3  //
4
5  #include <stdio.h>
6  #include <time.h>
7  #include <stdlib.h>
8
9  int main(void) {
10     int high = 100;
11     int number_of_tries = 7;
12
13     /*
14      * (1) print the rules of the game to players
15      */
16     printf("Let us play the Guess the Number game.\n"
17           "The computer will generate a random number between 1 and %d.
18           \n"
19           "You have %d tries.\n",
20           high, number_of_tries);
21
22     /*
23      * (2) generate a random number between 1 and high
24      */
25     srand(time(NULL));
26     int secret = rand() % high + 1;
27     printf("Test: secret = %d\n", secret);
28
29     while (number_of_tries > 0) {
30         /*
31          * (3) ask the player to enter his/her guess
32          */
33         printf("Please enter your guess number.\n"
34               "You still have %d tries.\n", number_of_tries);
35
36         /*
37          * (4) obtain the guessed number, compare it with the secret
38          *      number,
39          *      and inform the player of the result.
40          */
41         int guess = 0;
42         scanf("%d", &guess);
43         printf("Test: guess = %d\n", guess);
44
45         if (guess == secret) {
46             printf("You Win!\n");
47             break;
48         } else if (guess > secret) {
49             printf("guess > secret\n");
50         } else {
51             printf("guess < secret\n");
52         }
53     }
54 }
```

```
52     /*
53     * (5) repeat (3) and (4) until the player wins or loses.
54     */
55     number_of_tries--;
56
57     if (number_of_tries == 0) {
58         printf("You Lose!\n");
59     }
60 }
61
62 return 0;
63 }
```