```c
//
// Created by hfwei on 2024/9/19.
//

#include <stdio.h>
#include <stdlib.h>
#include <time.h>

int main(void) {
  int high = 100;
  int chance = 7;

  /*
   * print the rule of the game
   */
  printf("The computer will generate a random number between 1 and %d\n"
         "You have %d chances.\n",
         high, chance);
  /*
   * generate a random number
   */
  srand(time(NULL)); // use current time as seed for random generator
  // 0 .. RAND_MAX
  // 1 .. high
  int secret = rand() % high + 1;
  printf("secret = %d\n", secret);

  while (chance > 0) {

    /*
     *  let the player enter his/her guess number
     */
    printf("Enter your guess.\n");

    /*
     * store the guess number,
     * compare it with the secret,
     * and inform the player of the result
     */
    int guess;
    scanf("%d", &guess);
```

```c
43        if (guess == secret) {
44          printf("You Win!\n");
45          break;
46        } else if (guess > secret) {
47          printf("guess > secret\n");
48        } else {
49          printf("guess < secret\n");
50        }
51
52        /*
53         * loop: repeat until the player wins or loses
54         */
55        chance--;
56        // chance = chance - 1;
57      }
58
59      return 0;
60   }
```

```c
 1  //
 2  // Created by hfwei on 2024/9/19.
 3  //
 4
 5  // single-line comment
 6  // Created by hfwei on 2023/9/15.
 7  //
 8
 9  /*
10   * this is a multi-line comment
11   * this is a multi-line comment
12   */
13
14  // directive
15  // .h: header file
16  // stdio: standard input/output
17  #include <stdio.h>
18
19  /*
20   * main function
21   * y <- f(x)
22   * int: integer (return)
23   */
24  int main(void) {
25    // "hello world\n": string
26    // printf: print + f (format)
27    printf("Hello World\n");
28
29    // return statement (return to operating system)
30    // 0: exit code
31    return 0;
32  }
```

```
1 add_executable(hello hello.c)
2 add_executable(guess guess.c)
```