

Untitled-1

```
1  #include <stdio.h>
2  #include <stdlib.h>
3  #include <time.h>
4
5  #define MAX_ATTEMPTS 10
6
7  void play_game() {
8      int lower_bound = 1, upper_bound = 100;
9      int target_number, guess, attempts_left;
10
11      // Seed the random number generator
12      srand(time(NULL));
13
14      // Generate a random number between lower_bound and upper_bound
15      target_number = (rand() % (upper_bound - lower_bound + 1)) + lower_bound;
16
17      printf("Guess the number between %d and %d. You have %d attempts.\n", lower_bound,
upper_bound, MAX_ATTEMPTS);
18      attempts_left = MAX_ATTEMPTS;
19
20      while (attempts_left > 0) {
21          printf("Enter your guess: ");
22          scanf("%d", &guess);
23
24          if (guess < lower_bound || guess > upper_bound) {
25              printf("Please guess a number between %d and %d.\n", lower_bound, upper_bound);
26              continue;
27          }
28
29          if (guess < target_number) {
30              printf("Too low! ");
31          } else if (guess > target_number) {
32              printf("Too high! ");
33          } else {
34              printf("Congratulations! You've guessed the number correctly.\n");
35              return;
36          }
37
38          attempts_left--;
39          if (attempts_left > 0) {
40              printf("You have %d attempts left.\n", attempts_left);
41          } else {
42              printf("Sorry, you've run out of attempts. The number was %d.\n", target_number);
43          }
44      }
45  }
46
47  int main() {
```

```
48     int play_again;
49
50     do {
51         play_game();
52
53         printf("Do you want to play again? (1 for Yes, 0 for No): ");
54         scanf("%d", &play_again);
55     } while (play_again == 1);
56
57     printf("Thanks for playing!\n");
58     return 0;
59 }
60
```