gcc program.c   # Compiles program.c and generates a default executable named a.out **./a.out**   # Runs the compiled program
gcc program.c -o my_program   # Compiles program.c and creates an executable named my_program **./my_program**   # Runs the compiled program
gcc program.c -o input_program   # it takes inputs from input1.txt and displays the result in the terminal. **./input_program < input.txt**
gcc program.c -o io_program **./io_program < input.txt > output.txt** # it takes the inputs from input1.txt and creates the myoutput.txt document and writes the result here.
diff output1.txt myoutput.txt # compares the document output1.txt with the document myoutput.txt.
diff --ignore-all-space output1.txt myoutput.txt # compares the document output1.txt with the document myoutput.txt without ignoring the spaces.

QUESTION : RECURSIVE Number Guessing Game

Write a C program:

1. The computer randomly chooses a number between 1 and 50.

2. The user tries to guess this number. After each guess, the program provides feedback:

    a. "Too high"

    b. "Too low"

    c. "Correct!"

3. The program will allow **up to 5 attempts** to guess the correct number. If the user doesn't guess correctly within 5 attempts, the program should **display the correct number** and end the game.

4. The guessing process must be implemented **RECURSIVELY**.

5. The program should also count the number of attempts recursively and display it at the end.

Requirements: The program must use a **RECURSIVE FUNCTION**.

=== Recursive Number Guessing Game ===	=== Recursive Number Guessing Game ===
Attempt 1/5 - Enter your guess (1-50): 15	Attempt 1/5 - Enter your guess (1-50): 10
Too low. Try again.	Too low. Try again.
Attempt 2/5 - Enter your guess (1-50): 35	Attempt 2/5 - Enter your guess (1-50): 20
Too high. Try again.	Too low. Try again.
Attempt 3/5 - Enter your guess (1-50): 25	Attempt 3/5 - Enter your guess (1-50): 30
Correct! You guessed the number in 3 attempts.	Too low. Try again.
	Attempt 4/5 - Enter your guess (1-50): 40
	Too high. Try again.
	Attempt 5/5 - Enter your guess (1-50): 35
	Sorry, you've exceeded the maximum number of attempts. The correct number was 38.