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 Rock-Paper-Scissors Game

Create a Rock-Paper-Scissors game in C:

- 1. The player plays against the computer.
- 2. The game continues recursively until either the player or the computer reaches 3 wins.
- 3. In each round The player selects:
 - a. 1 = Rock
 - b. 2 = Paper
 - c. 3 = Scissors.
 - d. Anything else: Write a message "Invalid choice! Try again".
- 4. The computer randomly selects a move.
- 5. The program determines the winner of that round.
- 6. After each round, display scores and the winner of the round.
- 7. Use a recursive function to continue the game until one of them wins 3 TIMES.

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

=== Recursive Rock-Paper-Scissors Game ===

Choose your move (1 = Rock, 2 = Paper, 3 = Scissors): 1

Player chose: Rock

Computer chose: Scissors

Player wins this round!

Current Score - Player: 1 | Computer: 0

Choose your move (1 = Rock, 2 = Paper, 3 = Scissors): 2

Player chose: Paper

Computer chose: Rock

Player wins this round!

Current Score - Player: 2 | Computer: 0

Choose your move (1 = Rock, 2 = Paper, 3 = Scissors): 3

Player chose: Scissors

Computer chose: Rock

Computer wins this round!

Current Score - Player: 2 | Computer: 1

Choose your move (1 = Rock, 2 = Paper, 3 = Scissors): 2

Player chose: Paper

Computer chose: Scissors

Computer wins this round!

Current Score - Player: 2 | Computer: 2

Choose your move (1 = Rock, 2 = Paper, 3 = Scissors): 3

Player chose: Scissors

Computer chose: Paper

Player wins this round!

Player wins the game! Final Score: Player 3 - 2 Computer