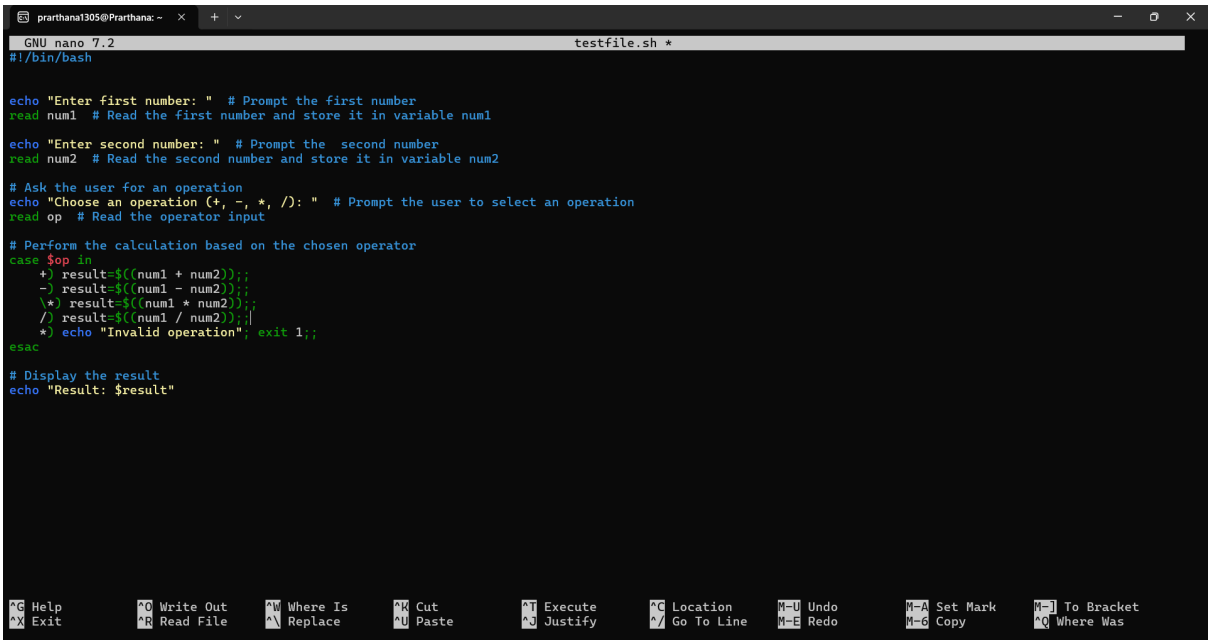
Assignment 1-
Part 2- Shell scripts

Shell script : calculator(to add,subtract.multiply,divide) two numbers:



output:

Use of nano in Shell Scripting

nano is a simple, lightweight, and user-friendly text editor used in Linux-based systems to create and edit files, including shell scripts.

Summary of Basic Calculator (testfile.sh)

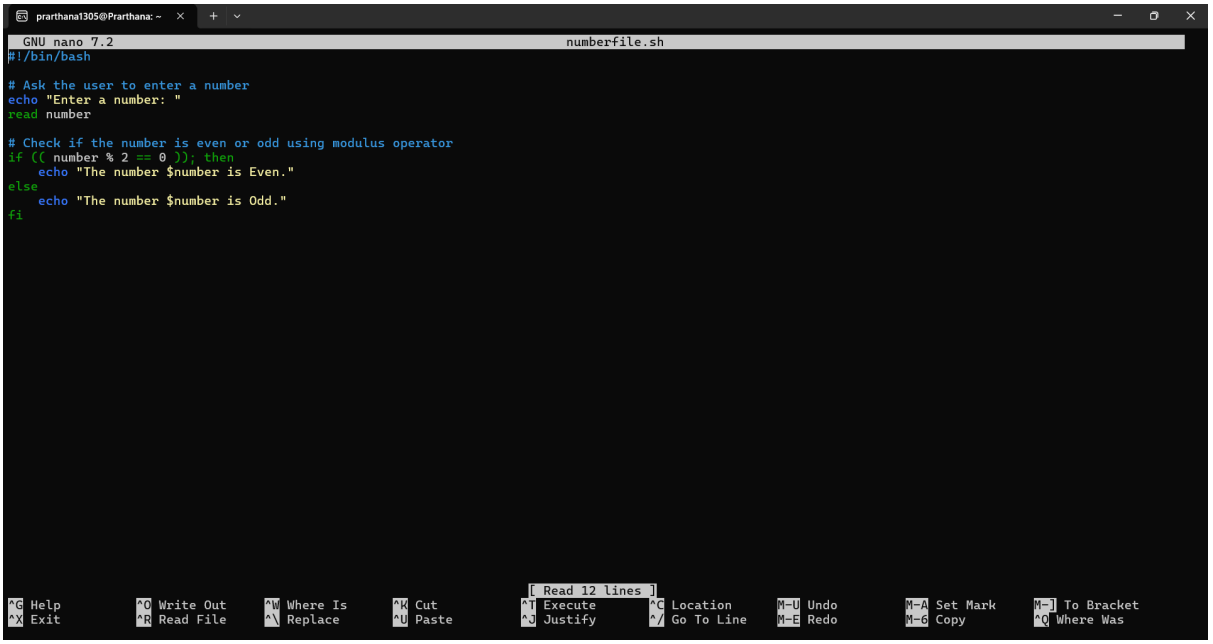
User Input (read) → Takes two numbers and an operator from the user.
Arithmetic Operations ($((expression))) → Performs mathematical calculations.
Case Statement (case ... esac) → Handles different arithmetic operations.
Exit Status (exit 1) → Exits if an invalid operation is entered.

Explanation:

Prompts the user to enter two numbers (num1 and num2).
Prompts the user to choose an arithmetic operation (+, -, *, /).
Uses a case statement to check the selected operation.
Performs the corresponding calculation using $(( )).
Displays the result or prints "Invalid operation" if the input is incorrect.

Use Case:
This script automates simple arithmetic calculations, eliminating the need for manual calculations or using a calculator.

Shell script to check a number is even or odd:



output:

Use of nano in Shell Scripting
nano is a simple, lightweight, and user-friendly text editor used in Linux-based systems to create and edit files, including shell scripts.

Summary of Even or Odd number check:
User Input (read) → Accepts a number from the user.
Arithmetic Evaluation (((expression))) → Performs the modulus operation.
Conditional Statement (if-else) → Checks if the number is even or odd.

Explanation:
Prompts the user to enter a number using echo.
Reads the input into the variable number using read.
Checks if the number is divisible by 2 using ((number % 2 == 0)).

Prints "Even" or "Odd" based on the condition.

Use Case:
This script automates the process of checking whether a number is even or odd, reducing the need for manual calculations.