

Control Flow Statements, Operators and Expressions:

1. Develop a warehouse inventory management system that tracks incoming and outgoing stock. Perform the operations: Add Stock, View stock, Delete stock, and Update stock.
2. Create a traffic light simulation that displays different light transitions based on a timer.

Output:

Traffic Light Simulation

RED Light - STOP

GREEN Light - GO

YELLOW Light - SLOW DOWN

3. Design a number guessing game where the program hints at high or low values.

Display the Output:

Welcome to the Number Guessing Game!

I have chosen a number between 1 and 100. Try to guess it!

Enter your guess: 50

Too high! Try again.

Enter your guess: 25

Too low! Try again.

Enter your guess: 37

Congratulations! You guessed the number in 3 attempts!

Do you want to play again? (y/n): n

Thanks for playing! Goodbye!

4. Design a stock portfolio manager that calculates profit/loss after stock transactions.
Perform the Operations - **Buy Stocks** – Add stocks to the portfolio, **Sell Stocks** – Remove stocks and compute profit/loss, **View Portfolio** – Display all stock holdings, **Calculate Profit/Loss**
5. Implement a program to calculate electricity bill based on unit consumption.
6. Write an age difference calculator that finds the difference between two given birthdates.
7. Create a speed and distance calculator based on user inputs.
8. Write a program to check if three sides can form a valid triangle.
9. Develop a program to perform arithmetic operations on complex numbers.
10. Implement a basic arithmetic calculator supporting +, -, *, /, and modulus operations.