

CL1002 – Programming Fundamentals Lab

Quiz # 02 BS CS (Section C)

Difficulty level: ★★☆☆☆

Note:

- Submit a pdf containing all your C code with all possible screenshots of every task output on Google Classroom.
- Please submit your file in this format (roll-no-name) i.e. (23P-1234-Ali.pdf).

Problem: 1

Create a C program to manage an employee payroll system for a company. Implement functions for calculating different types of allowances and deductions based on the basic salary entered by the user:

- `calculateHousingAllowance`: Calculates and returns the housing allowance for an employee based on their basic salary. The housing allowance is 5% of the employee's basic salary.
- `calculateTransportAllowance`: Calculates and returns the transportation allowance for an employee based on their basic salary. The transportation allowance is 7% of the employee's basic salary.
- `securityCharges`: Calculates and returns the security charges to an employee. Security charges are a fixed amount of 5000 Rs.
- `calculateNetSalary`: Calculates and returns the net salary of an employee based on their basic salary, allowances (housing and transportation), and deductions (security charges).

In the main function, create a program that allows the user to enter the basic salary of an employee and calculates and displays the following details:

Housing allowance.

Transportation allowance.

Security charges.

Net salary after deductions.

Use the functions mentioned above to perform these calculations. Use 25000 basic salary as output.

Output

Welcome to the Employee Payroll System!

Enter the basic salary of the employee: 25000

Employee Details:

Basic Salary: 25000 Rs

Housing Allowance: 1250 Rs

Transportation Allowance: 1750 Rs

Security Charges: 5000 Rs

Net Salary: 20500 Rs

Problem: 2

Create a C program that interacts with the user to read a number. The program should calculate the square of the number if it is negative and the cube of the number if it is positive.

Problem: 3

Write a program in C that takes 3- digit number and displays its digit in 3 separate lines by using function. For example, if user enters 123, the program displays the output as follows:

1
2
3