

National University of Computer and Emerging Sciences



Lab Manual # 5

Programming Fundamentals

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Section	1B
Semester	Fall 2022

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Objectives

The objectives of this lab are to cover the following:

- Control Structures

Task 1: You have to develop a program which approximates salary of a candidate for a certain job. Salary depends upon its qualification and experience in related field. Only male candidates with age more than 25 years are preferred for this job. If candidate is a fresh graduate, salary will be in range of 25-40K, but if his qualifications are MS or PhD, then person with experience of more than 5 years will get salary 70k+ otherwise 40k to 70k.

Task 2: Write a program in C++ to display the input number in reverse order

Sample Output:

Input a number: 12345

The number in reverse order is: 54321

Task 3: Write a program that calculates the occupancy rate for a hotel. The program should start by asking the user how many floors the hotel has. A loop should then iterate once for each floor. In each iteration, the loop should ask the user for the number of rooms on the floor and how many of them are occupied. After all the iterations, the program should display how many rooms the hotel has, how many of them are occupied, how many are unoccupied, and the percentage of rooms that are occupied. The percentage may be calculated by dividing the number of rooms occupied by the number of rooms.

NOTE: It is traditional that most hotels do not have a thirteenth floor. The loop in this program should skip the entire thirteenth iteration.