National University

CL-1002
Programming Fundamentals
Lab # 1

Objectives:

- Practice on pseudocode

Note: Carefully read the following instructions (*Each instruction contains a weightage*)

1. First think about statement problems and then write your logic on Copy / Notebook.
2. Write pseudocode in handwritten on **Paper using Pen.**
3. Write **Your Name** and **Roll No** on your Paper/Sheet's first page.
4. Do not copy from any source otherwise you will be penalized with negative marks.
5. Complete your lab **within given Time Slot**.

Problem: Write pseudocode of simple sequence programs.

1. Write the steps of Adding three numbers.
2. Finding the average of three numbers.
3. Find the area of a Rectangle. **(Area = Length * Width)**
4. Write the steps to calculate the percentage of student marks based on Math, Science, English, and Urdu. **(Percentage = (Obtained / Total) * 100)**
5. Calculate the Interest of a Bank Deposit **(Formula "Interest=Amount*Years*Rate/100)**
6. Compute the perimeter of a rectangle. **(Perimeter = 2 * (Length * Width))**
7. Write a program logic that calculates the total of a retail sale. The program should ask the user for the following: the **retail price of the item being purchased** and the **sales tax rate**. Once the information has been entered the program should calculate and display the following: the sales tax for the purchase and the total sale.
8. Write a program logic that calculate the total bill of the shopping, a person purchases two keyboards each worth of 100$, three mouse each worth of 50$. Calculate the Total in **PKR**. **(Note: Dollar to PKR 1$ = 215PKR)**
9. Write a program that calculates the current balance in a savings account. The program should obtain from the user the following information: the **starting balance**, the **total amount of deposits made**, and the **total amount of withdrawals** made. After the

program has calculated the current balance, it should be displayed on the screen. **Assume one input for deposits and one input for withdrawals. Make the pseudo-code for this problem.**

Best of Luck☺

You need to done with your exercise within given time.