

National University



Of Computer & Emerging Sciences - CFD Campus

CL-1002 Programming Fundamentals

Lab - 1

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Sections: BCS-1B **Due Date & 23-August-2024**,

Time: 04:30 PM

Objectives:

• Practice Algorithms and Pseudocode.

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

- 1. Use proper font family and font size of heading, subheading, and normal text.
- 2. First think about statement problems and then write/draw your logic on copy.
- 3. Write pseudocode on Microsoft Word (save your file in .docs format).
- 4. Please submit your file with this name **24F1234 lab1**.
- 5. Do not copy from any source otherwise you will be penalized with negative marks.
- 6. Submit your lab on Google Classroom.

Problem: Write pseudocode / Algorithms of simple sequence programs.

- 1. Read and display a user's name.
- 2. Adding four numbers.
- 3. Finding the average of four numbers.
- 4. Calculate the area of a circle (formula: Area = π * radius²).
- 5. Calculate the Interest of a Bank Deposit (formula Interest=Amount*Years*Rate/100)
- 6. Convert Distance from Kilometers to Miles (formula: Miles = Kilometers * 0.621371).
- 7. Compute the area of a triangle (formula: Area = $\frac{1}{2}$ * base * height).
- 8. Write a program that takes the user's hourly pay rate and the number of hours worked for the week as input. Calculate their pay for the week, considering a tax deduction of 15%. Display the net pay after deducting taxes.