

NM Lab Sheet
II Year / II Part
Faculty: Computer/Electrical

Labsheet#1

Objectives:

1. Execution of a sample program with `printf()`, `scanf()`
2. Demonstrate Branching & Looping Statements
3. Demonstrate data in tabular format (e.g. Multiplication Table)
4. Calculate different type of errors for actual & entered value of π (used up to 6 decimal places)
5. Demonstrate use of macro with argument for the equation $A = \pi r^2$
6. Implements different types of function to calculate $A = \pi r^2$
7. WAP to convert temperature from $^{\circ}\text{C}$ to $^{\circ}\text{F}$.

Lab Assignment#1

1. Discuss the advantages & limitations in solving mathematical problems by numerical techniques rather than analytically.
2. What are the applications of Numerical Method in engineering & science? Discuss it.
3. Define error and write its different types with examples. If $x = 1.350253$ is rounded off to four significant digits, find the absolute and relative errors.
4. Differentiate pseudo-code with actual program code.
5. Write an algorithm to find simple & compound interest.