

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 $A = \pi r^2$
6. Demonstrate use of **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.