



**VIT**  
**UNIVERSITY**  
(Estd. u/s 3 of UGC Act 1956)

**SCHOOL OF INFORMATION TECHNOLOGY AND ENGINEERING**

**Subject : Object Oriented Programming Lab**

**Class : MS-SE Object Oriented Programming Lab**

## **PRACTICAL SHEET**

### **Cycle Sheet 1- Basics**

1. Write a program to reverse a given number (e.g.: given no =12345 , reverse=54321)
2. Write a program to display the Fibonacci Series.(Use While Loop).
3. Write a program to check the given number is prime number or not.
4. Write a program that simulates a simple calculator. It reads two integers and a character. If the character is +, the sum is printed; if it is -, the difference is printed; if it is \*, the product is printed; if it is /, the quotient is printed; and if it is %, the remainder is printed. Use switch statement.
5. A Program to display the name of the day in a week, depending upon the number which is entered by the user.
6. Find the Sum of following Series using *any Looping Structure*
  - ( i )  $1+2+3+\dots+n$
  - ( ii )  $1+3+5+\dots+n$
  - ( iii )  $x-x^3/3!+x^5/5!-x^7/7!+\dots$
  - ( iv )  $1+2^2+3^2+\dots+n^2$
7. Write a program that reads an array and print the sum and average of all elements of the array. Also print the memory address and its contents for each element of the array.
8. Design a program to count the number of words and characters in a phrase typed by the user.

9. Write a program that reads one line of text and then prints it with its entire letters capitalized.
10. Write a program to reverse a string without using library function.
11. Write a program using Array to delete the duplicate elements in an array of numbers.
12. Using Enumerated data type and *Switch...Case*, write a C++ program to perform the four basic Arithmetic Operations
  - a) Addition b) Subtraction c) Multiplication d) Division
13. Write a program to check if a given  $N \times N$  Matrix is symmetric or not.
14. Write a program to find all roots of a Quadratic equation.