

# Vivekananda School of Information Technology

Branch/Sem: BCA-FIRST SEMESTER

Subject :- C Programming Lab BCA 151

## LIST OF PRACTICALS

Note: All students are required to conduct the listed practical and include the solutions in the Practical file. These are to be conducted along with the coverage of syllabus in the classroom.

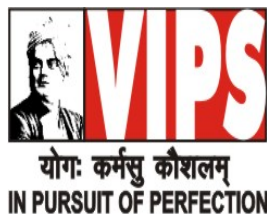
**STUDENTS ARE REQUIRED TO GET THEIR PRACTICAL FILES CHEKED ON WEEKLY BASIS.**

Unit no	Application Area/ Concept on which practical is based	Problem Statement										
Unit-1	Use of scanf(), printf(), Variable initialization and declaration.  Use of arithmetic, relational, conditional, logical operators.	1. Program to find area and circumference of circle. 2. Program to swap of two no's using third variable. 3. Program to swap of two no's without using third variable 4. Program to calculate the gross salary for any basic salary entered through keyboard where dearness allowance is 40% of the basic salary and house rent allowance is 20% of the basic salary. 5. A grocery shop decides to give its customers a discount on the total purchases if it exceeds Rs. 1000. The quantity purchased and price per item is entered through the keyboard. WAP to calculate the final sales bill. 6. WAP to find out the sum of two numbers without using + operator.										
Unit-1	Use of if ,if-else, nested if-else, switch statement , For loop, While ,do-while loop, continue, goto, break	7. Program to find greatest of 3 numbers 8. WAP to determine whether a given number is “odd” or “even” 9. Program to display first 10 natural no & their sum. 10. With the help of a menu driven program, implement a Calculator and to determine whether a given year is a leap year or not using && and    operators.  11. Program to calculate the grade of a student according to marks obtained in 5 subjects. on the basis of their percentage. <table><tr><th><u>%</u></th><th><u>Grade</u></th></tr><tr><td>&gt;=70</td><td>First</td></tr><tr><td>Between 50 to 69</td><td>Second</td></tr><tr><td>Between 40 to 59</td><td>Third</td></tr><tr><td>&lt; 40</td><td>Fail</td></tr></table> 12. Program to print a table of any number.	<u>%</u>	<u>Grade</u>	>=70	First	Between 50 to 69	Second	Between 40 to 59	Third	< 40	Fail
<u>%</u>	<u>Grade</u>											
>=70	First											
Between 50 to 69	Second											
Between 40 to 59	Third											
< 40	Fail											



		a) Transpose of a matrix . b) Sum of two matrices. c) Multiplication of two matrices. d) Sum of diagonal elements of a matrix.
Unit-II	pre-processor/macros	32. Program to calculate area of rectangle, square and circle using macros.
Unit-III	Structure, File handling	33. Program to show how to access the elements of nested structure. 34. Program to read the numbers from a file and save the even numbers in a file named EVEN and odd numbers in a file named ODD. 35. Program to create a file STUDENT that contains information about a student. It consists of rollno, name and address. Program should also print all the records.
Unit-IV	Library function	36. Program that implements command line arguments. 37. Program that illustrates different standard library functions.

**VIVEKANANDA INSTITUTE OF PROFESSIONAL STUDIES**  
**VIVEKANANDA SCHOOL OF INFORMATION TECHNOLOGY**



**BACHELOR OF COMPUTER APPLICATION**

**INTRODUCTION TO PROGRAMMING LANGUAGE USING C**

**Guru Gobind Singh Indraprastha University**  
**Sector - 16C, Dwarka, Delhi - 110078**



**SUBMITTED TO:**

**DR. NEETU GOEL**  
**Assistant Professor**  
**VSIT**

**SUBMITTED BY:**

**<Name of the Student>**

**<Course with section>**

**<Enrollment No: \_\_\_\_\_>**