

JAGANNATH INTERNATIONAL MANAGEMENT SCHOOL

(Department of Information Technology)



Laboratory Manual

Introduction to Programming Language Using 'C'

Bachelor of Computer Applications

Semester- Ist

Subject : Practical – I [C Prog. Lab]

Subject Code: BCA 151

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Submitted To:

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Submitted By:

Name

Roll No.

Class

List of Programs

S. No.	Program	Remarks
1	WAP to input two numbers and perform following operations using 2 and 3 variables: (a)add(b)subtract(c)multiply(d)divide(e) modulus	
2	WAP to swap two numbers with and without using third variable	
3	WAP to compute compound interest and Simple interest.	
4	WAP to find the largest of three numbers with conditional operator [without using if statement].	
5	WAP to check whether the No is even or odd	
6	WAP to check character is vowel or not	
7	WAP to input 3 numbers and print in ascending order.	
8	WAP to find the roots of the quadratic equation considering all the conditions.	
9	WAP to check whether the character is capital case, small case, number and special character	
10	<p>An electricity board charges the following rates for the use of electricity: For the first 200 units : 80 P per unit For the next 100 units : 90 P per unit Beyond 300 units : Rs 1.00 per unit All the user are charged a minimum of Rs. 100 as meter charge. If the total amount is more than Rs 400, then an additional surcharge of 15% of total amount is charged.</p> <p style="text-align: center;">WAP to read the number of units consumed and print out the charges.</p>	
11	WAP to find the sum of all even numbers and sum of all odd numbers from 1 to n.	
12	WAP to find the factorial of a given number	
13	WAP to print Fibonacci series	
14	WAP to input a number and print the reverse of the number and also check whether the entered number is palindrome or not.	
15	WAP to input a number and check the number is Armstrong number	

16	WAP to print out the letters from A to Z and a to z, and their integer values [ASCII values].	
17	WAP to take two integer operands, perform the arithmetic operation on these operands according to user choice with the help of a menu of options containing all the arithmetic operations with exit option. Prints the result and ask user whether he wants to continue or exit. (Use Switch Statement and do_while).	
18	WAP to print and find the sum of the series: 1, 4, 6, 9, 11..... upto n terms.	
19	WAP to display all the prime numbers from 1 to n.	
20	WAP to calculate the factorial of a number using function [with or without using recursion].	
21	WAP to calculate power of a number using function [with or without using recursion].	
22	WAP to print the table of a number using function [with or without using recursion].	
23	WAP to check whether a given number is prime number or not using function.	
24	<p>WAP to print the following pyramids:-</p> <pre> 12345 54321 EDCBA 1234 5432 DCBA 123 543 CBA 12 54 BA 1 5 A 1 123454321 121 1234321 12321 12321 1234321 121 123454321 1 1 1 1234554321 12 21 1234 4321 123 321 123 321 1234554321 12 21 1234554321 1 1 </pre>	

25	WAP to print an array in reverse order and also find the sum of all elements.	
26	WAP to search an element in 1-D array using linear search.	
27	WAP to find the sum of odd element and even element of an array also count odd and even element.	
28	WAP to find the maximum and minimum element from an array.	
29	Write a menu driven program for matrices to do the following operation depending on whether the operation requires one or two matrices: <ul style="list-style-type: none"> • Addition of two matrices • Subtraction of two matrices • Product of two matrices. • Transpose of a matrix • To calculate the sum of all the diagonal elements of a matrix. 	
30	WAP to accept a string and count no of capital letters, no. of small letters and no. of special characters.	
31	WAP to accept a string and convert lower case letters in upper case and vice-versa.	
32	WAP to count the number of words, alphabets, vowels, consonants and digits in a line of text.	
33	Write a program to perform the following operations on Strings without using String functions <ul style="list-style-type: none"> • To find the Length of String. • To concatenate two string. • To Copy one sting to another string. • To find Reverse of a string and check whether string is palindrome or not. 	
34	WAP to swap two numbers using call by value and call by reference concept.	
35	WAP to compute the sum of all elements stored in an array using pointers.	
36	WAP to define a structure with members as student name, father name, roll no., marks. Display the records of 5 students entered by the user and also print percentage of each Student. [Hint:- Use Array of structure].	

37	WAP to transfer data which is entered by the user to a text file and then read that data and print it on the screen.	
38	WAP to count the number of characters, digits, spaces and words in a text file.	
39	WAP to transfer odd numbers and even numbers from an array into two different files ODD and EVEN using command line arguments.	
40	a) WAP to transfer the contents of a file into another file. (i.e. copy one file to another file. b) WAP to copy the contents of one file into another file using command line arguments.	

Instructions to be Strictly followed

- File should have a neat and clean Index with a Remarks column only [You need to write Remarks instead of Date to be signed by after removing dates.]
- All the programs should be arranged in a word file with its output.
- Outputs of the programs should be original, not duplicated.
- All programs should include Name, Roll No. as per discussion in the class.
- **Every student will be responsible for evaluation of their practical file on time as mentioned in the above schedule failing which their practical file will not be evaluated. To avoid any problem, submit your file for evaluation on or before the mentioned dates. [Do not give any excuse for not submitting your file. [Your file should be evaluated on time.]**