

# **C,C++ Assignments**

## **MODULE: 1 (C Language - Introduction)**

- Display This Information **using printf**
  - a. Your Name
  - b. Your Birth date
  - c. Your Age
  - d. Your Address

## **MODULE: 2 (C Language - Fundamentals)**

- Write a program to make a square and cube of number.
- Write a program to find the simple Interest & Compound Interest.

## **MODULE: 3 (C Language - Programs)**

- Write a Program to check the given year is leap year or not.
- Write a Program to check the given number is prime or not prime.
- Write a program user enter the 5 subjects mark. You have to make a total and find the percentage.

- a) percentage > 75 you have to print “Distinction”
  - b) percentage > 60 and percentage <= 75 you have to print “First class”
  - c) percentage >50 and percentage <= 60 you have to print “Second class”
  - d) percentage > 35 and percentage <= 50 you have to print “Pass class”
  - e) Otherwise print “Fail”
- Write a program of to find out the Area of Triangle, Rectangle and Circle using Switch Case .(Must Be Menu Driven)
  - Write a program you have to print the Fibonacci series up to user given number
  - Write a program to print the number in reverse order.
  - Write a program make a summation of given number(E.g. 1523 ans :-11)
  - Pyramid Programs
 

A) * ** *** ****	B)   1 2   3 4   5   6 7   8   9   10	C)   * * * * * * * * * *
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  - Write a program to find out the max number from given 10 elements of array
  - Write a program to sort the array of 5 elements.
  - Write a Program of find the element of given position from the array
  - Write a program to find out the Max number from given Matrix
  - Write a program to copy string from one string to another string with user define function.
  - Write a program to find out the factorial of given number using function.
  - Write a program to print the Fibonacci series using function

- Write a Program of Print a number and check the number is palindrome or not using recursive Function
- Write a program of structure for five employee that provides the following information print and display empno, empname, address and age
- Write program to make an addition of two number using pointer
- Write a program to concatenate the two string using pointer.
- Write a program to sort the numbers using pointer and functions

## **MODULE: 4 (C Language – File, Debugging &Error Handling)**

- Write a program to read data from file.
- Write a program to read and write data from the file.

## **MODULE: 5 (C++ Language - Basic)**

- Write a C++ Program to print Message “Welcome to Tops Technologies”

## **MODULE: 6 (C++ Language - Programs)**

- Define a class to represent a bank account. Include the following members:

**Data Member: -**

- a) Name of the depositor -
  - b) Account Number
  - c) Type of Account -
  - d) Balance amount in the account -
  - e) Member Functions -
  - f) To assign values -
  - g) To deposited an amount -
  - h) To withdraw an amount after checking balance -
  - i) To display name and balance
- Define a class to represent lecture details. Include the following members and the program should handle at least details of 5 lecturer.  
**Data members:**
    - a) Name of the lecturer
    - b) Name of the subject
    - c) Name of course
    - d) Number of lecturers**Data functions:**
    - a) To assign initial values
    - b) To add a lecture details
    - c) To display name and lecture details
  - Write a program of find the simple interest using constructor with dynamic initialization. Make constructor like Interest (int principal, int year, int rate)  
Interest (int principal, int year, float rate = 2.5)
  - Write a program to find the multiplication values and the cubic values using inline function.
  - Write a Program of Two 1D Matrix Addition using Operator Overloading
  - Write a program of two concatenate the two strings using Operator Overloading

- Assume a class cricketer is declared. Declare a derived class batsman from cricketer .Data member of batsman. Total runs, Average runs and best performance. Member functions input data, calculate average runs, Display data. (Single Inheritance)
- Create a class person having members name and age. Derive a class student having member percentage. Derive another class teacher having member salary. Write necessary member function to initialize, read and write data. Write also Main function (Multiple Inheritance)
- Assume that a bank maintains two kinds of accounts for customer, one called as saving account and other as current accounts provides Simple interest and withdraw facilities but no Cheque book facility.
  - a) The current account provides Cheque book facility but no interest.
  - b) Current account holders should maintain a minimum balance and if the balance falls below this level a service charges is imposed
- Create a class account that stores customer name, account number and type of account. From this derive classes curr\_acc and sav\_acct to make them more specific to their requirements Include necessary member functions in order to achieve the following tasks
  - a) Accepts deposit from a customer and update balance.
  - b) Display the balance.
  - c) Compute and deposit interest.
  - d) Permit withdraws and updates the balance.
  - e) Check for the minimum balance, impose penalty, necessary and update the balance.
- Write a program to swap the two numbers using friend function
- Write a program to read and write data in to file

- Write a program of to swap the two values using templates

## **MODULE: 7 (C++ Language – Exception Handling)**

- Create an example of use delete and new operator.
- Write a program of to sort the array using templates.