

## **APPRENTICESHIP**

## **SET 51 – C++ Programming Language**

## (Operator Over loading and public Inheritance)

- 1. Write a program to illustrate the overloading of ( ) ( function call) operator.
- 2. Write a program to illustrate the overloading of -> (this pointer) operator.
- 3. Write a program to illustrate the overloading of **new** and **delete** operator.
- 4. WAP to find biggest of two numbers where one number is inherited from super class with its data members.
- 5. WAP to find average of 3 numbers where all the three numbers are derived from different class in multilevel inheritance using different input Function (Do not Overload the Functions).
- 6. WAP to find biggest of three numbers through the Multi-level Inheritance.
- 7. WAP to find area of circle and circumference of circle using hierarchical inheritance.
- 8. Write a program to inherit two points in multiple manner into a third class called Distance to get the distance between the two points in the same class member function and print the results.
- 9. Write a program to inherit a class called Center which represents the center of Circle by three classes called Point1, Point2 and Point3. Check which point is lies on the Circumference of the circle or not.
- 10. Write a program to create 5 classes which contains one data member and one member function to get the data. Inherit all classes in multilevel manner into a 5th class and create an array for these data members in function of 5th class. Then pass this array to a function of the class called **Sort** to sort the array in descending order. And print the resulted array in the 5<sup>th</sup> Class only.



## **Assignments**

- 11. Write a program to illustrate the overloading of ~ operator to get the transpose of a matrix of size 3X3.
- 12. Write a program to find the product of two Matrices of size 2 X 2 by overloading \* operator.
- 13. WAP to find the whether the two co-ordinates of a point belongs to 1st Quadrant of a Cartesian coordinate system or not by simple Inheritance.

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