

APPRENTICESHIP

SET 52 – C++ Programming Language

(Public Inheritance with Constructors)

1. 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 5th Class only.

2. 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 member's in function of 5th class. Send this array to a class called **Evenodd** to create two array's called **even array** and **odd array**. Finally send the Even array to a class called **Big** to get the biggest element and odd array to a class called **Small** to get the Smallest to print the both in **Evenodd** class.

3. 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 member's in function of 5th class. Send this array to a class called **MSD** to get mean and standard deviation embedded in an object of DataKeeper and return the same to main function to print.

4. WAP to create 4 classes which contains one data member and one member function to get the data. Inherit all classes in multilevel manner into a 4th class and create a Matrix for these data members in a function of 4th class. Send this Matrix to a class called Transpose to create transpose of the Matrix in method called findTranspose and print it.

5. Write a program to create 5 classes which contains one data member and one member function to get the data. Inherit all classes in multiple manner into a class called FormArray to form an array in an member function. Send this array to a function of a class called Reverse to print the reverse array in class FormArray only.

6. Write a program to inherit three classes indicates three points into a class called Triangle in Multiple manner to find the Area of a triangle in a member function of the same class and print the results.

7. Write a program to find the Biggest of two data members in derived class, Where data members belongs to two different classes with the same name and inherited in Simple inheritance manner.

8. Write a program to find the sum of two Integers belongs to two different classes with different names, find the sum in sub class. Assign the values to data members using the default constructors.

9. Write a program to find the biggest of three integers which belongs to three different classes with parameterized constructors and inherited into third class in multi-level manner using Ternary operator.

10. Write a program to create 5 classes which contains one data member and one parameterized constructor to get the data. Inherit all classes in multilevel manner into a 5th class and create an array for these data member's in function of 5th class. Send this array to a function of another class called **Reverse** to find the reverse of array and print the result in the fifth class only.

11. Write a program to create 5 classes which contains one data member and one parameterized constructor to get the data. Inherit all classes in multilevel manner into a 5th class and create an array for these data member's in function of 5th class. Send this array to a function of another class called **ReverseElement** to find the reverse of each element of the array and print the result in the fifth class only.

12. Write a program to create 4 classes which contains one data member and one member function to get the data. Inherit all classes in multilevel manner into a 4th class and create a Matrix for these data members in a function of 4th class. Send this Matrix to a class called DiagonalElements to create array of Principal Diagonal Elements and Secondary Diagonal Elements into two separate arrays and then Embed both the arrays in an object of Class called Data and return the same to main and Print it.

13. Write a program to create 4 classes which contains one data member and one member function to get the data. Inherit all classes in multiple manner into a class called Matrix to form a matrix in a member function. Send this matrix to a class called Sum to get the sum of the matrix elements.
