

**APPRENTICESHIP**

**SET 45 – C++ Programming Language**

**( Classes and Objects, Static Data member and member function)**

- 1) Write a program to find the sum of matrix elements where matrix is data member of class. Assign the matrix using the object.
- 2) Write a program to swap the said rows and columns in two different member functions of a class. Assign the matrix using the object.
- 3) Write a program to print the Principal and Secondary diagonal elements of a square matrix, where the matrix is the data member of a class, Assign the matrix using the getData ( )
- 4) Write a program to find the GCD of two integers, where two integers , gcd are the data members of the class. Define the member functions outside the class.
- 5) Write a program to find the sum up to n, Where n is the data member of the class. Define the member function outside the class and getSum() should be recursion function.
- 6) Write a program to illustrate the use of **this** pointer.
- 7) Write a program to illustrate the use of **static data members** through counting the member function call.
- 8) Write a program to illustrate the use of **static data members** by counting the number of random iterations through different objects.
- 9) Write a program to illustrate the use of **static member function** by printing a text.
- 10) Write a program to find the sum of two integers after reversing them using a **static member function**.

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