**LAB ASSIGNMENT NO: 4**

**PROBLEM STATEMENT:**

Write a function template and class template selection sort. Write a program that inputs, sorts and outputs an integer array and a float array.

**AIM OF ASSIGNMENT:**

Develop a C++ Program to implement and understand the concepts of Class Template and Function Template. Using the concept of template, sorting the array of integer and float elements by selection sort algorithm.

**DESCRIPTION:**

In this program, we have created a class template to declare a array to store numbers in private and three functions to accept , sort(selection sort) and display in public mode. We have created a function template for each of the function respectively. Using the template , the user can input array elements of integer or float type. The input elements will then be sorted using the selection sort and displayed accordingly. To access the class template variables, two objects are created (one for integer, the other for float).In this way we have used the same selection sort function to sort both integers and float numbers.

**OOP CONCEPT USED:**

* Template Class
* Template Function
* Selection-sort Algorithm
* do while loop
* Menu driven statements

**CONCLUSION:**

In this program we learnt the concept of class template and function template and its implementation in using Selection sort Algorithm for sorting the elements in asscending order.