

Exercise 13:

To construct a cpp program for sorting the numbers using templates concept.

Source Code:

```
#include<iostream>

using namespace std;

template<class T>

void bubble(T a[], int n)

{

    int i, j;

    for(i=0;i<n-1;i++)

    {

        for(j=0;j<n-1;j++)

        {

            if(a[j]>a[j+1])

            {

                T temp;

                temp = a[j];

                a[j] = a[j+1];

                a[j+1] = temp;

            }

        }

    }

}

int main()

{

    int a[6]={ 17,16,15,14,9,-1};

    char b[4]={'z','b','x','a'};

    bubble(a,6);

    cout<<"\nSorted Order Integers: ";

    for(int i=0;i<6;i++)

    cout<<a[i]<<"\t";
```

```
bubble(b,4);  
cout<<"\nSorted Order Characters: ";  
for(int j=0;j<4;j++)  
cout<<b[j]<<"\t";  
}
```

OUTPUT:

Sorted Order Integers: -1 9 14 15 16 17

Sorted Order Characters: a b x z