Report No : 1
Report Name: Write a program to Bubble sort in an array
Code:

```
#include <iostream>
using namespace std;

int main()
{
   int n, i;
   cout << "Enter size of array: ";
   cin >> n;
   int myArray[n];
   for (i = 0; i < n; i++)
   {
      cout << "Enter " << (i + 1) << " element: ";
      cin >> myArray[i];
   }
   for (i = 0; i < n; i++)
   {
      for (int j = 0; j < n - 1; j++)
      {
         if (myArray[j] > myArray[j + 1])
         {
            int temp = myArray[j];
            myArray[j] = myArray[j + 1];
            myArray[j + 1] = temp;
         }
      }
   }
   cout << "Bubble Sort new array: ";
   for (i = 0; i < n; i++)
   {
      cout << myArray[i] << " ";
   }
}
```

```
PS Z:\CSE All File\4th Semester\Data Structure\3
ta Structure\3rd Lab Report\Report Code\" ; if (
e_Sort }
Enter size of array: 5
Enter 1 element: 300
Enter 2 element: 199
Enter 3 element: 355
Enter 4 element: 255
Enter 5 element: 65
Bubble Sort new array: 65 199 255 300 355
PS Z:\CSE All File\4th Semester\Data Structure\3
```

Report No : 2

Report Name: Write a program to Selection sort in an array

Code:

```
#include <iostream>
using namespace std;

int main()
{
   int n, i, min;
   cout << "Enter size of array: ";
   cin >> n;
   int myArray[n];
   for (i = 0; i < n; i++)
   {
      cout << "Enter " << (i + 1) << " element: ";
      cin >> myArray[i];
   }
   for (i = 0; i < n; i++)
   {
      min = i;
      for (int j = i + 1; j < n; j++)
      {
         if (myArray[j] < myArray[min])
         {
            min = j;
         }
      }
      int temp = myArray[i];
      myArray[i] = myArray[min];
      myArray[min] = temp;
   }
   cout << "Seletion Sort new array: ";
   for (i = 0; i < n; i++)
   {
      cout << myArray[i] << " ";
   }
}
```

```
PS Z:\CSE All File\4th Semester\Data Structure\3rd
ta Structure\3rd Lab Report\Report Code\" ; if ($?)
\Selection_sort }
Enter size of array: 6
Enter 1 element: 36
Enter 2 element: 65
Enter 3 element: 20
Enter 4 element: 45
Enter 5 element: 600
Enter 6 element: 6
Seletion Sort new array: 6 20 36 45 65 600
PS Z:\CSE All File\4th Semester\Data Structure\3rd
```

Report No : 3

Report Name: Write a program to Insertion sort in an array

Code:

```
#include <iostream>
using namespace std;

int main()
{
   int n, i, min, temp;
   cout << "Enter size of array: ";
   cin >> n;
   int myArray[n];
   for (i = 0; i < n; i++)
   {
      cout << "Enter " << (i + 1) << " element: ";
      cin >> myArray[i];
   }
   for (i = 1; i < n; i++)
   {
      temp = myArray[i];
      int j = i - 1;
      while (j >= 0 && myArray[j] > temp)
      {
         myArray[j + 1] = myArray[j];
         j--;
      }
      myArray[j + 1] = temp;
   }
   cout << "Seletion Sort new array: ";
   for (i = 0; i < n; i++)
   {
      cout << myArray[i] << " ";
   }
}
```

```
ta Structure\3rd Lab Report\Report Code\" ; if ($?) { g++
\Insertion_sort }
Enter size of array: 7
Enter 1 element: 650
Enter 2 element: 456
Enter 3 element: 987
Enter 4 element: 355
Enter 5 element: 54
Enter 6 element: 89
Enter 7 element: 700
Insertion Sort new array: 54 89 355 456 650 700 987
PS Z:\CSE All File\4th Semester\Data Structure\3rd Lab Rep
```