**Assignment E35**

**==========================================================================**

**#include** <iostream>

**using** **namespace** std;

**class** sorting

{

**int** n,a[50];

**public**:

**void** **getData**()

{

cout<<"\nEnter the value of n:\n";

cin>>n;

cout<<"\nEnter n elements:\n";

**for** (**int** i = 0; i < n; i++)

{

cin>>a[i];

}

}

**void** **bubblesort**()

{

**for** (**int** pass = 1; pass <= n-1; pass++)

{

**for** (**int** j=0; j<n-pass; j++)

{

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

{

**int** temp = a[j+1];

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

a[j] = temp;

}

}

}

}

**void** **selectionsort**()

{

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

{

**int** min=a[i];

**int** loc=i;

**for**(**int** j=i+1;j<n;j++)

{

**if**(min>a[j])

{

min=a[j];

loc=j;

}

}

**int** temp=a[i];

a[i]=a[loc];

a[loc]=temp;

}

}

**void** **display**()

{

**for** (**int** i = 0; i < n; i++)

{

cout<<a[i]<<" ";

}

}

};

**int** **main**(**void**)

{

sorting s1,s2;

s1.getData();

s1.bubblesort();

cout<<"\*\*\*After bubble sort\*\*\*\n";

s1.display();

s2.getData();

s2.selectionsort();

cout<<"\*\*\*After selection sort\*\*\*\n";

s2.display();

**return** 0;

}

==========================================================================

Output

Enter the value of n:

5

Enter n elements:

12

3

56

4

2

\*\*\*After bubble sort\*\*\*

2 3 4 12 56

Enter the value of n:

5

Enter n elements:

78

56

4

34

7

\*\*\*After selection sort\*\*\*

4 7 34 56 78