```cpp
/*
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Unit:1
Program:Selection Sort
*/
#include<iostream>

using namespace std;

int main(){
        int n,i,j,loc,min,tmp;
        int A[10];

        cout << "*** Selection Sort ***" << endl << endl;

        cout << "Enter the size of the array: ";
        cin >> n;

        cout << "Enter the Elements of the Array:\n";
        for(i=0 ; i<n ; i++){
                cin >> A[i];
        }

        cout << endl << endl;
        cout << "Original Array: ";
        for(i=0 ; i<n ; i++){
                cout << A[i] << " ";
        }

        //Selection Sort
        for(i=0 ; i<n ; i++){
                //Assume the first of unsorted region is minimum
                min = A[i];
                loc = i;

                for(j=i+1 ; j<n ; j++){
                        if(A[j] < min){
                                min = A[j];
                                loc = j;
                        }//end of if
                }//end of j loop
                //Exchange minimum with first position
                tmp = A[i];
                A[i] = A[loc];
                A[loc] = tmp;
```
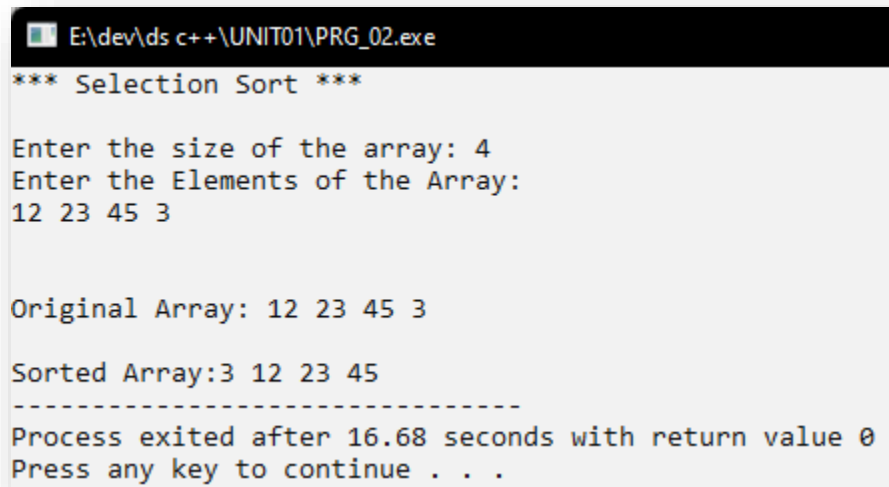
```
        }//end of i loop
        cout << endl << endl;
        cout << "Sorted Array:";
        for(i=0 ; i<n ; i++){
                cout << A[i] << " ";
    }
}//end of main
```

OUTPUT:

```
E:\dev\ds c++\UNIT01\PRG_02.exe
*** Selection Sort ***

Enter the size of the array: 4
Enter the Elements of the Array:
12 23 45 3


Original Array: 12 23 45 3

Sorted Array:3 12 23 45
--------------------------------
Process exited after 16.68 seconds with return value 0
Press any key to continue . . .
```