/\*

Name:Harsh Singh

ROll No:1262

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:**

