

```
1  #include <bits/stdc++.h>
2  using namespace std;
3
4  void swap(int *xp, int *yp)
5  {
6      int temp = *xp;
7      *xp = *yp;
8      *yp = temp;
9  }
10
11 void selectionSort(int arr[], int n)
12 {
13     int i, j, min_idx;
14     for (i = 0; i < n-1; i++)
15     {
16         min_idx = i;
17         for (j = i+1; j < n; j++)
18             if (arr[j] < arr[min_idx])
19                 min_idx = j;
20
21         swap(&arr[min_idx], &arr[i]);
22     }
23 }
24
25 void printArray(int arr[], int size)
26 {
27     int i;
28     for (i=0; i < size; i++)
29         std::cout << arr[i] << " ";
30     std::cout << endl;
31 }
32
33 int main()
34 {
35     int size;
36     std::cout << "Enter the size of the array: ";
37     std::cin >> size;
38     if (size <= 0) {
39         std::cerr << "Invalid array size. Please enter a positive integer." &
40             << std::endl;
41         return 1;
42     }
43     int array[size];
44
45     std::cout << "Enter the elements of the array:" << std::endl;
46     for (int i = 0; i < size; ++i) {
47         std::cout << "Element " << i + 1 << ": ";
48         std::cin >> array[i];
```

```
49     }  
50  
51  
52     int n = sizeof(array)/sizeof(array[0]);  
53     selectionSort(array, n);  
54     std::cout << "Sorted array: ";  
55     printArray(array, n);  
56     return 0;  
57 }  
58
```