

CollegeWork\DataStructure\selection-sort-algorithm.cpp

```
1 // a c++ program for selection sort.
2 #include <bits/stdc++.h>
3 using namespace std;
4
5 //Selection sort function.
6 void selectionSort(int arr[], int n)
7 {
8     int i, j, min_idx;
9     for (i = 0; i < n - 1; i++) {
10         min_idx = i;
11         for (j = i + 1; j < n; j++) {
12             if (arr[j] < arr[min_idx])
13                 min_idx = j;
14         }
15         if (min_idx != i)
16             swap(arr[min_idx], arr[i]);
17     }
18 }
19 int main()
20 {
21     int arr[] = { 1, 2, 18, 9, 6, 244, 24, 23, 0, -11, 27 };
22     int n = sizeof(arr) / sizeof(arr[0]);
23
24     // Function Call
25     selectionSort(arr, n);
26     cout << "Sorted array: \n";
27     int i;
28     for (i = 0; i < n; i++) {
29         cout << arr[i] << " ";
30     }
31     return 0;
32 }
33
34 /*
35 OUTPUT
36
37 PS S:\Workspace\CollegeWork\DataStructure> g++ .\selection-sort-algorithm.cpp
38 PS S:\Workspace\CollegeWork\DataStructure> ./a
39 Sorted array:
40 -11 0 1 2 6 9 18 23 24 27 244
41 PS S:\Workspace\CollegeWork\DataStructure>
42 */
```