

## Selection Sort Code In C++

```
#include <iostream>
using namespace std;

// Function to perform Selection Sort
void selectionSort(int arr[], int n) {
    for (int i = 0; i < n - 1; i++) {
        // Assume the minimum is at position i
        int minIndex = i;

        // Find the index of the minimum element in the unsorted part
        for (int j = i + 1; j < n; j++) {
            if (arr[j] < arr[minIndex]) {
                minIndex = j;
            }
        }

        // Swap the found minimum element with the element at index i
        int temp = arr[i];
        arr[i] = arr[minIndex];
        arr[minIndex] = temp;
    }
}

// Function to print array
void printArray(int arr[], int n) {
    for (int i = 0; i < n; i++) {
        cout << arr[i] << " ";
    }
    cout << endl;
}

int main() {
    int arr[] = {29, 10, 14, 37, 13};
    int n = sizeof(arr) / sizeof(arr[0]);

    cout << "Original array: ";
    printArray(arr, n);
}
```

```
selectionSort(arr, n);  
  
cout << "Sorted array: ";  
printArray(arr, n);  
  
return 0;  
}
```

**Output-**

Original array: 29 10 14 37 13  
Sorted array: 10 13 14 29 37

www.tpcglobal.in