

SELECTION SORT

CODE:

```
#include <bits/stdc++.h>
using namespace std;

// Function for Selection sort
void selectionSort(int arr[], int n)
{
    int i, j, min_idx;

    // One by one move boundary of
    // unsorted subarray
    for (i = 0; i < n - 1; i++) {

        // Find the minimum element in
        // unsorted array
        min_idx = i;
        for (j = i + 1; j < n; j++) {
            if (arr[j] < arr[min_idx])
                min_idx = j;
        }

        // Swap the found minimum element
        // with the first element
        if (min_idx != i)
            swap(arr[min_idx], arr[i]);
    }
}

int main()
{
```

```

int n;
cout<<"Enter size of array: ";
cin>>n;
int arr[n];
for (int i=0; i<n;i++){
cout<<"Enter element: ";
cin>>arr[i];
}

selectionSort(arr, n);
cout << "Sorted array: \n";
int i;
for (i = 0; i < n; i++) {
    cout << arr[i] << " ";
    cout << endl; }
return 0;
}

```

OUTPUT:

```

Output
/tmp/vV1N17VrM1.o
Enter size of array: 5
Enter element: 12
Enter element: 43
Enter element: 15
Enter element: 28
Enter element: 67
Sorted array:
12
15
28
43
67

```