

# Lecture-16

## Selection Sort

```
#include <bits/stdc++.h>
void selectionSort(vector<int>& arr, int n)
{
    // Write your code here.
    for(int i=0;i<n;i++){
        int minIndex = i;
        for(int j=i+1;j<n;j++){
            if(arr[j]<arr[minIndex]){
                minIndex = j;
            }
        }
        swap(arr[minIndex], arr[i]);
    }
}
```

Stable and Unstable algorithms-->

<https://www.baeldung.com/cs/stable-sorting-algorithms#:~:text=Stable%20sorting%20algorithms%20preserve%20the,elements%20relative%20to%20one%20another.>