## Bubble Sort

```
#include <iostream>
using namespace std;
void swap(int *xp, int *yp)
{
        int temp = *xp;
        *xp = *yp;
        *yp = temp;
}
void bubbleSort(int arr[], int n)
        int i, j;
        for (i = 0; i < n-1; i++)
        for (j = 0; j < n-i-1; j++)
               if (arr[j] > arr[j+1])
                       swap(&arr[j], &arr[j+1]);
}
void printArray(int arr[], int size)
{
        int i;
        for (i = 0; i < size; i++)
               cout << arr[i] << " ";
        cout << endl;</pre>
}
int main()
{
        int arr[] = {64, 34, 25, 12, 22, 11, 90};
        int n = sizeof(arr)/sizeof(arr[0]);
        bubbleSort(arr, n);
        cout<<"Sorted array: \n";</pre>
        printArray(arr, n);
        return 0;
}
```

## Selection Sort

```
#include <iostream>
using namespace std;
void swap(int *xp, int *yp)
        int temp = *xp;
        *xp = *yp;
        *yp = temp;
}
void selectionSort(int arr[], int n)
        int i, j, min_idx;
        for (i = 0; i < n-1; i++)
                min_idx = i;
                for (j = i+1; j < n; j++)
                if (arr[j] < arr[min_idx])</pre>
                       min_idx = j;
                swap(&arr[min_idx], &arr[i]);
        }
}
void printArray(int arr[], int size)
{
        int i;
        for (i=0; i < size; i++)
                cout << arr[i] << " ";
        cout << endl;</pre>
}
int main()
{
        int arr[] = {64, 25, 12, 22, 11};
        int n = sizeof(arr)/sizeof(arr[0]);
        selectionSort(arr, n);
        cout << "Sorted array: \n";</pre>
        printArray(arr, n);
        return 0;
}
```