

## INSERTION SORT

```
#include <iostream>

using namespace std;

void insertionSort(int arr[], int n) {
    for (int i = 1; i < n; i++) {
        int key = arr[i];          // Element to be inserted

        int j = i - 1;

        // Move elements that are greater than key
        // to one position ahead
        while (j >= 0 && arr[j] > key) {
            arr[j + 1] = arr[j];

            j--;
        }

        arr[j + 1] = key;  // Insert the key at correct position
    }
}

int main() {
    int n;

    cout << "Enter number of elements: ";

    cin >> n;

    int arr[n];

    cout << "Enter elements:\n";

    for (int i = 0; i < n; i++) {
        cin >> arr[i];
    }
}
```

```
insertionSort(arr, n);

cout << "Sorted array:\n";

    for (int i = 0; i < n; i++) {

        cout << arr[i] << " ";

    }

return 0;

}
```

### Output

Enter number of elements: 5

Enter elements:

2 6 8 1 3

Sorted array:

1 2 3 6 8

=== Code Execution Successful ===