

INSERTION SORT

CODE:

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

void insertionSort(int arr[], int n)
{
    int i, key, j;
    for (i = 1; i < n; i++) {
        key = arr[i];
        j = i - 1;

        while (j >= 0 && arr[j] > key) {
            arr[j + 1] = arr[j];
            j = j - 1;
        }
        arr[j + 1] = key;
    }
}

// Driver code
int main()
{
    int n;
    cout<<"Enter number of elements: ";
    cin>>n;
    int arr[n];
    for (int i=0; i<n; i++){
        cout<<"Enter element: ";
        cin>>arr[i];
    }

    cout << "Sorted array: \n";
    insertionSort(arr,n);{
        int i;

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

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

            cout << endl; }
    }

    return 0;
}
```

OUTPUT:

Output

/tmp/kXTK029fHd.o

Sorted array: 6 7 9 12 15