

```
#include <stdio.h>
```

```
void insertionSort(int arr[], int size)
```

```
{
```

```
    int j, temp;
```

```
    for (int i = 1; i < size; i++)
```

```
    {
```

```
        temp = arr[i];
```

```
        j = i - 1;
```

```
        while (j >= 0 && temp < arr[j])
```

```
        {
```

```
            arr[j + 1] = arr[j];
```

```
            j--;
```

```
        }
```

```
        arr[j + 1] = temp;
```

```
    }
```

```
}
```

```
int main()
```

```
{
```

```
    int arr[100], size;
```

```
    printf("\nEnter size ");
```

```
    scanf("%d", &size);
```

```
    printf("\nEnter array\n");
```

```
    for (int i = 0; i < size; i++)
```

```
        scanf("%d", &arr[i]);

insertionSort(arr, size);

printf("Sorted array\n");
for (int i = 0; i < size; i++)
    printf("%d ", arr[i]);

return 0;
}
```

```
Enter size 8
Enter array
1
9
6
70
89
34
45
12
Sorted array
1 6 9 12 34 45 70 89
```