

## Code, Compile & Run

Ide x +

C (Gcc 6.3) [info] [download] [share] [settings]

```
1
2
3 #include <stdio.h>
4
5 void bubblesort(int arr[], int size)
6 {
7
8     int i, j;
9     for (i = 0; i < size; i++)
10
11     {
12         for (j = 0; j < size - i; j++)
13
14         {
15             if (arr[j] > arr[j+1])
16                 swap(&arr[j], &arr[j+1]);
17
18         }
19     }
20
21 }
22
23
24 void swap(int *a, int *b)
25 {
26     int temp;
```

0.0 [refresh]

Open File

✓ Custom Input

Run

Custom Input

```
5
2 4 6 8 1
```

Status Successfully executed Date 2020-07-12 14:47:06 Time 0 sec Mem 9.424 kB

x

Input

```
5
2 4 6 8 1
```

Output

```
How many numbers you want to sort:
Enter 5 numbers :
Sorted array is 0 1 2 4 6
```

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C (Gcc 6.3)

```
36 }
37
38 int main()
39 {
40 {
41
42 int array[100], i, size;
43
44 printf("How many numbers you want to sort: ");
45
46 scanf("%d", &size);
47
48 printf("\nEnter %d numbers : ", size);
49
50 for (i = 0; i < size; i++)
51
52 scanf("%d", &array[i]);
53
54 bubblesort(array, size);
55
56 printf("\nSorted array is ");
57 for (i = 0; i < size; i++)
58 printf(" %d ", array[i]);
59
60 return 0;
61 }
62
63
64
```

0:0



Open File

✓ Custom Input

Run

Custom Input

```
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2 4 6 8 1
```

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Input

```
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2 4 6 8 1
```

Output

```
How many numbers you want to sort:
Enter 5 numbers :
Sorted array is 0 1 2 4 6
```

Algorithm:

step 1: start

step 2: Bubble Sort (int a[], int n)

step 3: for (i = 1 to n - 1)

sorted = true

step 4: for (j = 0 to n - 1 - i)

step 5: if  $a[j] > a[j+1]$

temp = a[j]

a[j] = a[j+1]

a[j+1] = temp

sorted = false

end for

step 6: if sorted

step 7: break from i loop

end for

step 8: stop.

flowchart

