

Our Solution(s)

Run Code

Your Solutions

Run Code

Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 #include <vector>
4 using namespace std;
5
6 vector<int> insertionSort(vector<int> array);
7
8 // Best: O(n) time | O(1) space
9 // Average: O(n^2) time | O(1) space
10 // Worst: O(n^2) time | O(1) space
11 vector<int> insertionSort(vector<int> array) {
12     if (array.empty()) {
13         return {};
14     }
15     for (int i = 1; i < array.size(); i++) {
16         int j = i;
17         while (j > 0 && array[j] < array[j - 1]) {
18             swap(array[j], array[j - 1]);
19             j -= 1;
20         }
21     }
22     return array;
23 }
24
```

Solution 1   Solution 2   Solution 3

```
1 #include <vector>
2 using namespace std;
3
4 vector<int> insertionSort(vector<int> array) {
5     // Write your code here.
6     return {};
7 }
8
```

Our Tests

Custom Output

Submit Code

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```
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19
20 # Define the test case
21 def test_case():
22     # Create a list of numbers
23     numbers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
24
25     # Sort the numbers in ascending order
26     numbers.sort()
27
28     # Print the sorted numbers
29     print(numbers)
30
31 # Run the test case
32 test_case()
33
34 # Define the test case
35 def test_case():
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42     # Print the sorted numbers
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44
45 # Run the test case
46 test_case()
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48 # Define the test case
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56     # Print the sorted numbers
57     print(numbers)
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59 # Run the test case
60 test_case()
```

Run or submit code when you're ready.