

# **Insertion Sort**

Imagine that you are playing a card game where numbers are marked from 1 to 50. The dealer hands you exactly one new card. You have to put it into the correct place so that the cards you're holding are still sorted. The new card could be smaller than some of the cards you're already holding, and so you go down the line, comparing the new card against each card in your hand, until you find the place to put it. You insert the new card in the right place, and once again, your hand holds fully sorted cards.

This method takes a python list as input and returns the same list in sorted order.

### Test Case - 1

123456 123456

## Test Case - 2

43 23 11 78 51 67 11 23 43 51 67 78

#### Test Case - 3

60 41 37 52 20 1 1 20 37 41 52 60

## **Test Case - 4**

20 37 1 60 41 52 1 20 37 41 52 60

## **Explanation:**

First line in the test case is the list of integers separated by space. Last line of each test case is the output line that prints the list in sorted order.

## Note:

1. Do not accept more than 50 values as elements of the list.