

WK04\InsertionSort.py

```
1 x = [13,86,35,1,100,45,11,6,67,65,2,7,23,23,23,87,38,67,31,99,1,1,100]
2 y = [13,86,35,1,100,45,11,6,67,65,2,7,23,23,23,87,38,67,31,99,1,1,100]
3
4 def insertionSort(arr):
5     for i in range(1, len(arr), 1):
6         val = arr[i]
7         for j in range(i-1, -1, -1):
8             if arr[j] > val:
9                 arr[j], arr[j+1] = arr[j+1], arr[j]
10            else:
11                break
12
13 print("unsorted:\t", x)
14 insertionSort(x)
15 print("insertionSort:\t", x)
16 print("Python sort:\t", sorted(y))
```