









Challenge 2: Merge Two Sorted Lists

Given two sorted lists, merge them into one list which should also be sorted. Implement the solution in Python and see if your code runs successfully!

We'll cover the following

- Problem Statement
 - Input
 - Output
 - Sample Input
 - Sample Output
- Coding Exercise

Problem Statement

Implement a function that merges two sorted lists of m and n elements respectively, into another sorted list. Name it merge_lists(lst1, lst2).

Input

Two sorted lists.

Output

A merged and sorted list consisting of all elements of both input lists.



Sample Input



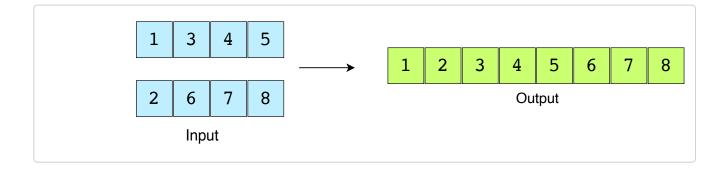




```
list1 = [1,3,4,5]
list2 = [2,6,7,8]
```

Sample Output

```
arr = [1,2,3,4,5,6,7,8]
```



Coding Exercise

Take a close look and design a step-by-step algorithm first before jumping on implementation. This problem is designed for your practice, so try to solve it on your own first. If you get stuck, you can always refer to the explanation and solution provided in the next section. Good Luck!

```
def merge_lists(lst1, lst2):
    # Write your code here
    for x in lst2:
        lst1.append(x)
    temp = 0
    for i in range(len(lst1)):
        for j in range(len(lst1)-1):
            if lst1[i] < lst1[j]:
                temp = lst1[i]
                     lst1[i] = lst1[j]
                      lst1[j] = temp
    return lst1</pre>
```



Interviewing soon? We've partnered with Hired so that \times companies apply to you instead of you applying to them. See how ①

