Problem 3: Given two sorted arrays **arr1[]** and **arr2[]** of sizes **n** and **m** in non-decreasing order. Merge them in sorted order. Modify arr1 so that it contains the first N elements and modify arr2 so that it contains the last M elements.

```
def merge_sorted_arrays(arr1, arr2):
    n=len(arr1)
    m=len(arr2)
    left = n - 1
    right = 0



    while left >= 0 and right < m:
        if arr1[left] > arr2[right]:
            arr1[left], arr2[right] = arr2[right], arr1[left]
            left -= 1
            right += 1
        else:
            break
    arr1.sort()
    arr2.sort()


arr1 = [1, 4, 8, 10]
arr2 = [2, 3, 9]
merge_sorted_arrays(arr1, arr2)
print("arr1[] =", arr1)
print("arr2[] =", arr2)
```

```
arr1 = [1, 4, 8, 10]
arr2 = [2, 3, 9]
merge_sorted_arrays(arr1, arr2)
print("arr1[] =", arr1)
print("arr2[] =", arr2)
```

input

```
arr1[] = [1, 2, 3, 4]
arr2[] = [8, 9, 10]


...Program finished with exit code 0
Press ENTER to exit console.
```