

Task 1: Merge Sorted Array

```
def mergeSortedArray(arr1, arr2):
    #To Do
    merge_arr = np.array([0]*(len(arr1) + len(arr2)))
    i,j,k =0,0,0
    while i < len(arr1) and j <len(arr2):
        if arr1[i] <= arr2[j]:
            merge_arr[k] = arr1[i]
            i +=1
        else:
            merge_arr[k] = arr2[j]
            j +=1
        k +=1
    while i<len(arr1):
        merge_arr[k] = arr1[i]
        i +=1
        k +=1
    while j<len(arr2):
        merge_arr[k] = arr2[j]
        j +=1
        k +=1
    return merge_arr
```

Task 2: Container with Most Water

```
def mostWater(arr):
    max_water = 0
    left = 0
    right = len(arr) - 1
    while left <right:
        width = right - left
        if arr[left] < arr[right]:
            curr_water = arr[left] * width
            left +=1
        else:
            curr_water = arr[right] * width
            right -=1
        if curr_water > max_water:
            max_water = curr_water
    print(max_water)
```

Task 3: Building Blocks

```
def check_similar(building_1, building_2):
    while building_1 and building_2:
        if building_1.elem != building_2.elem:
            return "Not Similar"
        building_1 = building_1.next
        building_2 = building_2.next
```

```
if building_1 or building_2:
    return "Not Similar"
return "Similar"
```

Task 4: Assemble Conga Line

```
def assemble_conga_line(conga_line):
    temp = conga_line
    while temp.next != None:
        if temp.elem > temp.next.elem:
            return False
        temp = temp.next
    return True
```

Task 5: Sum of Nodes

```
def sum_dist(head, arr):
    val = {}
    temp = head
    idx = 0
    while temp:
        val[idx] = temp.elem
        temp = temp.next
        idx += 1
    sum = 0
    for i in arr:
        if i in val:
            sum += val[i]
        else:
            sum += 0
    return sum
```