

HW1

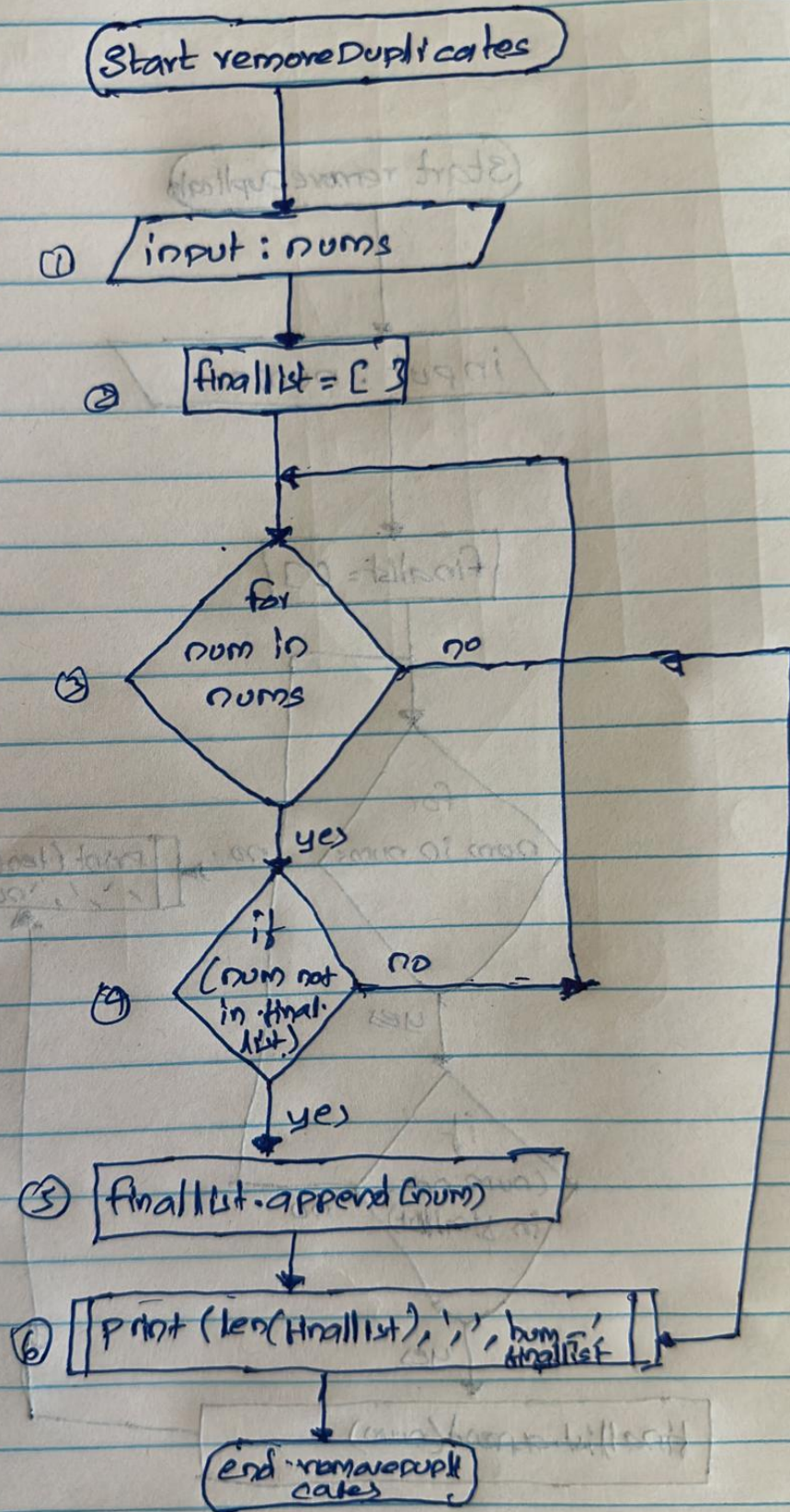
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19720cs

Please create a Python program using "for" loop to solve LeetCode's [26. Remove Duplicates from Sorted Array](#) question with the test case "Input: nums = [1,1,2], Output: 2, nums = [1,2]"

```
Q2) def removeDuplicates(nums:list):  
    finallist=[]  
    for num in nums:  
        if num not in finallist:  
            finallist.append(num)  
    print(len(finallist),',','nums = ',finallist)  
  
removeDuplicates([1,1,2])
```

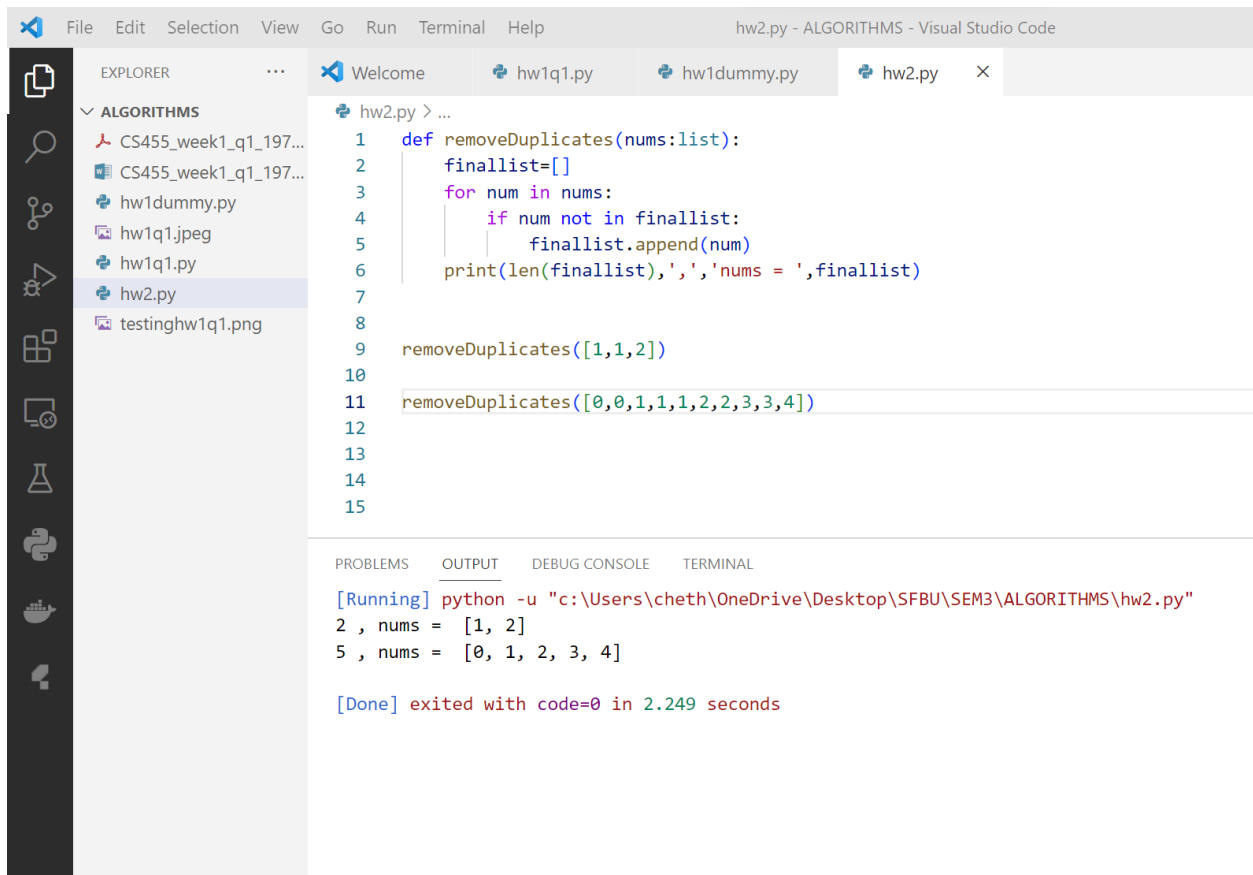
Flowchart:-



Tracetable:

Step	input	finalist	num in nums	num not in finalist	finalist.append(num)	screen
1	[1,2]					
2		?				
3			1			
4				True		
5					[1]	
3			1			
4				False.		
3			2			
4				True		
5					[1,2]	
6						2, nums =[1,2]

Testing



The screenshot shows the Visual Studio Code interface with the file explorer on the left, the editor in the center, and the output console at the bottom. The file explorer shows a folder named 'ALGORITHMS' containing several files, with 'hw2.py' selected. The editor displays a Python script with a function 'removeDuplicates' and two calls to it. The output console shows the execution of the script, displaying the length of the list and the list itself for each call.

```
File Edit Selection View Go Run Terminal Help hw2.py - ALGORITHMS - Visual Studio Code
```

EXPLORER

- ALGORITHMS
 - CS455_week1_q1_197...
 - CS455_week1_q1_197...
 - hw1dummy.py
 - hw1q1.jpeg
 - hw1q1.py
 - hw2.py
 - testinghw1q1.png

```
hw2.py > ...
1 def removeDuplicates(nums:list):
2     finallist=[]
3     for num in nums:
4         if num not in finallist:
5             finallist.append(num)
6     print(len(finallist),',','nums = ',finallist)
7
8
9 removeDuplicates([1,1,2])
10
11 removeDuplicates([0,0,1,1,1,2,2,3,3,4])
12
13
14
15
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
[Running] python -u "c:\Users\cheth\OneDrive\Desktop\SFBU\SEM3\ALGORITHMS\hw2.py"
2 , nums = [1, 2]
5 , nums = [0, 1, 2, 3, 4]

[Done] exited with code=0 in 2.249 seconds
```