Python 4

Total Marks

10.0

Pass Marks

5.0

Marks Obtained

NA

Status

NA

Report

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Start Time :  18 Dec 2020 09:13

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End Time :  31 Mar 2023 00:00

Question 1 :

create a function with the name check\_prime which takes a number as input and checks if the given number is prime or composite. The function returns 1 if the number is prime,0 if the number is composite and 0 otherwise.  
  
create another function with the name prime\_composite\_list which takes a list of numbers and checks whether the numbers in the list are prime or composite. Include all th prime numbers in one list and all the composite numbers in another list. Create a 3rd list and include the list of prime numbers and the list of composite numbers in the 3rd list and return the 3rd list from this function. The third list should be a list of lists.  
  
Note : use the function check\_prime to find whether the number is prime or composite.  
  
To test the code against your customized Input through console, please refer to the below instructions  
  
The first line in the sample input is the count of numbers to be provided in the input list  
The next few lines are the numbers to be included in the list provided one by one  
  
Sample Input :  
4  
11  
7  
90  
44  
  
Expected Output :  
  
[[11, 7], [90, 44]]  
  
  
Please use the below main program code to implement and to test/run your code and submit the complete code along with this main code.  
  
if \_\_name\_\_=='\_\_main\_\_':  
inp=[]  
count=int(input())  
for i in range(count):  
inp.append(int(input()))  
print(check\_prime(inp[1]))  
result=prime\_composite\_list(inp)  
print(result)  
  
Note: Request you to very carefully check the indentation of your code in the console before submitting. Some times while pesting the code copied from the debugger gets distorted in the console. In that case you have to modify the indentation as per Python syntax.

def check\_prime(n):

for i in range(2,n):

if n%i == 0:

return 0

return 1

def prime\_composite\_list(int\_list):

corr=[[], []]

for i in int\_list:

check = check\_prime(i)

# print(i, check)

if check:

corr[0].append(i)

else:

corr[1].append(i)

return corr

if \_\_name\_\_=='\_\_main\_\_':

inp=[]

count=int(input())

for i in range(count):

inp.append(int(input()))

print(check\_prime(inp[1]))

result=prime\_composite\_list(inp)

print(result)