

PYTHON SCRIPT

TEAM ID: PNT2022TMID41867

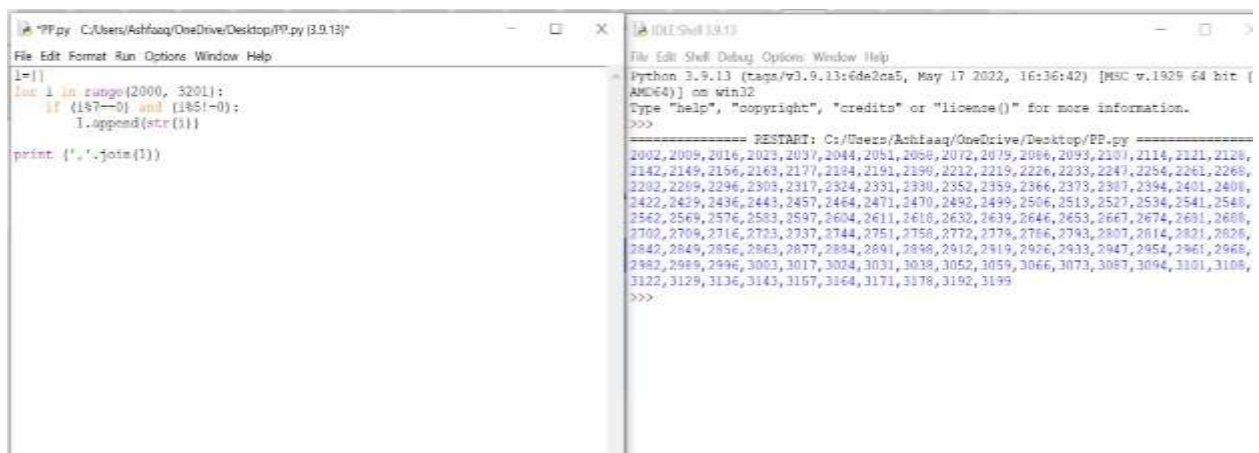
PROJECT TITLE: SIGNS WITH SMART CONNECTIVITY FOR BETTER ROAD SAFETY

Question-1:

Write a program which will find all such numbers which are divisible by 7 but are not a multiple of 5, between 2000 and 3200 (both included). The numbers obtained should be printed in a comma-separated sequence on a single line.

Solution:

```
l=[]
for i in range(2000, 3201):
    if (i%7==0) and (i%5!=0):
        l.append(str(i))
print(','.join(l))
```



The screenshot shows a Python script being executed in a Jupyter Notebook environment. The script is as follows:

```
l=[]
for i in range(2000, 3201):
    if (i%7==0) and (i%5!=0):
        l.append(str(i))
print(','.join(l))
```

The output of the script is a long string of numbers, separated by commas, representing all numbers between 2000 and 3200 that are divisible by 7 but not by 5. The output is displayed in a terminal window below the script.

Question-2:

With a given integral number n, write a program to generate a dictionary that contains (i, i*i) such that is an integral number between 1 and n (both included). and then the program should print the dictionary.


Suppose the following input is supplied to the program:
8

Then, the output should be:

{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64}

Solution:

```
n=int(input())
d=dict()
for i in range(1,n+1):
    d[i]=i*i
print d
```



The image shows a screenshot of a Python IDE (left) and a terminal window (right). The IDE window is titled 'Python - C:\Users\Ashfaq\OneDrive\Desktop\TF.py (3.9.13)' and contains the following code:

```
File Edit Format Run Options Window Help
n=int(input())
d=dict()
for i in range(1,n+1):
    d[i]=i*i
print(d)
```

The terminal window is titled 'CMD Shell 3.9.13' and shows the output of the program. It displays the prompt 'Python 3.9.13 [tags/v3.9.13:6de2ca5, May 17 2022, 14:16:18] [AMD64] on win32' followed by the prompt 'Type "help", "copyright", "credits" or "license()" for more information.' and the prompt 'RESTART: C:\Users\Ashfaq\OneDrive\Desktop\TF.py'. The output of the program is '1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81, 10: 100'.