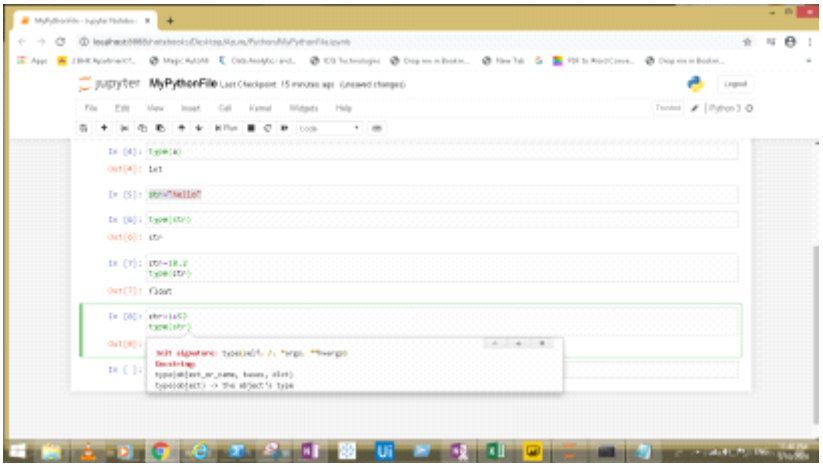
Sunday, May 10, 2020 11:40 PM

Task 1:

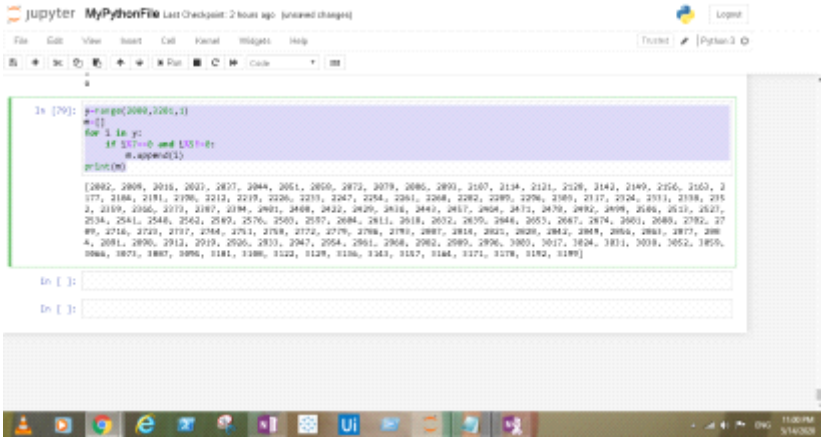
1.Install Jupyter notebook and run the first program and share the screenshot of the output.



2.

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.

```
y=range(2000,3201,1)
m=[]
for i in y:
   if i%7==0 and i%5!=0:
      m.append(i)
print(m)
```



3.

Write a Python program to accept the user's first and last name and then getting them printed in the the reverse order with a space between first name and last name.

```
In [108]: f1=input("Enter first name ")
          f2=input("Enter last name ")
          m=[f2+" "+f1]
          print(m)

          Enter first name abc
          Enter last name def
          ['def abc']
```

```
In [109]: f3=[]
          f3=f1+" "+f2
          print(f3)
          f3[::-1]

          abc def

Out[109]: 'fed cba'
```

4.

Write a Python program to find the volume of a sphere with diameter 12 cm.

Formula: $V=4/3*\pi*r^3$

```
In [5]: #Write a Python program to find the volume of a sphere with diameter 12 cm.
        #Formula: V=4/3 * π * r3
        pi=3.1415
        d=float(12)
        r=float(d/2)
        vol=(float(4/3)*(pi)*(r)**3)
        print(vol)

        904.752
```

Task 2

1.

Write a program which accepts a sequence of comma-separated numbers from console and generate a list.

```
In [110]: x=[]
          x=input("enter values separated by , ")
          print(x)

          enter values separated by , 1,2,3,5,6,7,8
          1,2,3,5,6,7,8
```

```
In [135]: y=list
          y=input("enter values separated by , ")
          print(y)

          enter values separated by , 1,2,4,6,8
          1,2,4,6,8
```

2.

Create the below pattern using nested for loop in Python.

```
*
**
***
****
*****
****
***
**
*
```

In [134]:
```
x=range(0,5,1)
y=range(5,0,-1)
for i in x:
    if i<=5:
        print("*"*i)
for j in y:
    if j>=0:
        print("*"*j)
```

```
*
**
***
****
*****
****
***
**
*
```

3.

Write a Python program to reverse a word after accepting the input from the user.

Sample Output:

Input word: AcadGild

Output: dilGdacA

In [141]:
```
w=[]
x=[]
w=input("Enter the word ")
x=w[::-1]

print(x)
```

```
Enter the word AcadGild
dliGdacA
```

4.

Write a Python Program to print the given string in the format specified in the **sample output.**

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a SOVEREIGN, SOCIALIST, SECULAR, DEMOCRATIC REPUBLIC and to secure to all its citizens

Sample Output:

```
WE, THE PEOPLE OF INDIA,
        having solemnly resolved to constitute India into a SOVEREIGN, !
                SOCIALIST, SECULAR, DEMOCRATIC REPUBLIC
                  and to secure to all its citizens
```

In [156]:
```
str1="WE,THE PEOPLE OF INDIA,\n\thaving solemnly resolved to constitute India into a SOVEREIGN,!\n\t\tSOCIALIST, SECULAR, DE
str1.expandtabs()
print(str1)
```

```
WE,THE PEOPLE OF INDIA,
        having solemnly resolved to constitute India into a SOVEREIGN,!
                SOCIALIST, SECULAR, DEMOCRATIC REPUBLIC
                and to secure to all its citizens
```