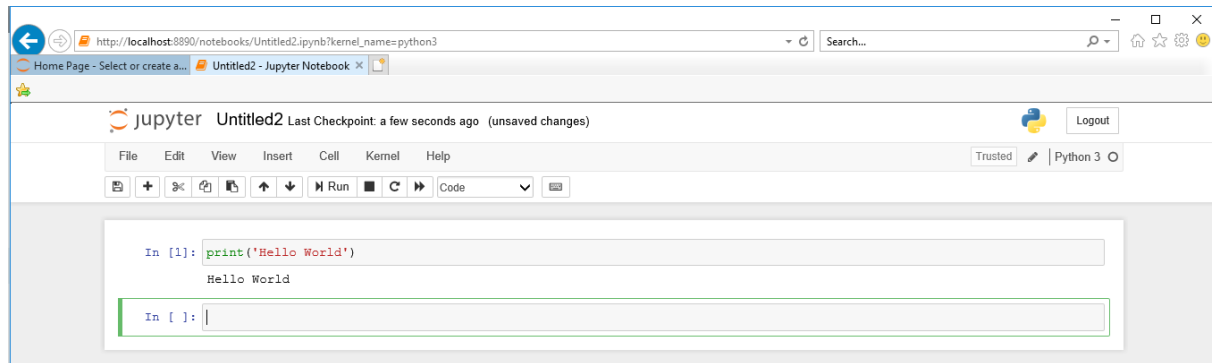


## Task 1:

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.

### Code:

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

```
In [10]: xx=[]
         for i in range(2000, 3201):
             if (i%7==0) and (i%5!=0):
                 xx.append(str(i))
         print(','.join(xx))

2002,2009,2016,2023,2037,2044,2051,2058,2072,2079,2086,2093,2107,2114,2121,2128,2142,2149,2156,2163,2177,2184,2191,2198,2212,2219,2226,2233,2247,2254,2261,2268,2282,2289,2296,2303,2317,2324,2331,2338,2352,2359,2366,2373,2387,2394,2401,2408,2422,2429,2436,2443,2457,2464,2471,2478,2492,2499,2506,2513,2527,2534,2541,2548,2562,2569,2576,2583,2597,2604,2611,2618,2632,2639,2646,2653,2667,2674,2681,2688,2702,2709,2716,2723,2737,2744,2751,2758,2772,2779,2786,2793,2807,2814,2821,2828,2842,2849,2856,2863,2877,2884,2891,2898,2912,2919,2926,2933,2947,2954,2961,2968,2982,2989,2996,3003,3017,3024,3031,3038,3052,3059,3066,3073,3087,3094,3101,3108,3122,3129,3136,3143,3157,3164,3171,3178,3192,3199
```

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

### Code:

```
fname = input("Enter the first number")
lname = input("Enter the last name")

print(fname[::-1] + " " + lname[::-1])
```

```
In [23]: fname = input("Enter the first number")
         lname = input("Enter the last name")

         print(fname[::-1] + " " + lname[::-1])
```

```
Enter the first numbernandini
Enter the last nameragavan
inidnan navagar
```

4. Write a Python program to find the volume of a sphere with diameter 12 cm.  
Formula:  $V = \frac{4}{3} * \pi * r^3$

**Code:**

```
d=12
r=d/2
pi = 3.1415926535897931
V= 4.0/3.0*pi* r**3
print('The volume of the sphere is: ',V)
```

```
In [19]: d=12
          r=d/2
          pi = 3.1415926535897931
          V= 4.0/3.0*pi* r**3
          print('The volume of the sphere is: ',V)

          The volume of the sphere is: 904.7786842338603
```

---

## Task 2:

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

**Code:**

```
values = input("Input some comma separated numbers : ")
list = values.split(",")

print('List : ',list)
```

```
In [9]: values = input("Input some comma separated numbers : ")
          list = values.split(",")

          print('List : ',list)

          Input some comma separated numbers : 3,4,5,6,7
          List :  ['3', '4', '5', '6', '7']
```

---

2. Create the below pattern using nested for loop in Python.

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

**Code :**

```
n=5;
for i in range(n):
    for j in range(i):
        print('* ', end="")
    print("")
```

```
for i in range(n,0,-1):
    for j in range(i):
        print('* ', end="")
    print("")
```

```
In [20]: n=5;
for i in range(n):
    for j in range(i):
        print('* ', end="")
    print("")

for i in range(n,0,-1):
    for j in range(i):
        print('* ', end="")
    print("")
```

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

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

**Sample Output:**

Input word: AcadGild

Output: dilGdacA

**Code:**

```
s = input("Enter a string: ")
print (s[::-1])
```

```
In [22]: s = input("Enter a string: ")
         print (s[::-1])
```

```
Enter a string: nandini
inidnan
```

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

**Code:**

```
print("WE, THE PEOPLE OF INDIA,\n\thaving solemnly resolved to constitute India into a  
SOVEREIGN, ! \n\t\tSOCIALIST, SECULAR, DEMOCRATIC REPUBLIC \n\t\t and to secure to all  
its citizens")
```

```
In [7]: print("WE, THE PEOPLE OF INDIA,\n\thaving solemnly resolved to constitute India into a SOVEREIGN, ! \n\t\tSOCIALIST, SEC  
< >
```

```
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
```