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

In [1]:
```
samp_list = [10, 20, 30, 20, 10, 50, 60, 40, 80, 50, 40]

dup_items =[]
unique_items =[]

for x in samp_list:
    if x not in unique_items :
       unique_items.append(x)
    else:
        dup_items.append(x)
print(unique_items)
print(dup_items)
```

```
[10, 20, 30, 50, 60, 40, 80]
[20, 10, 50, 40]
```

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.

In [2]:
```
l=[]

for i in range(1999, 3201):
    if (i%7==0) and (i%5!=0):
        l.append(str(i))

print(','.join(l))
```

```
2002,2009,2016,2023,2037,2044,2051,2058,2072,2079,2086,2093,2107,2114,2121,2128,2142,2149,2156,2163,2177,218
4,2191,2198,2212,2219,2226,2233,2247,2254,2261,2268,2282,2289,2296,2303,2317,2324,2331,2338,2352,2359,2366,23
73,2387,2394,2401,2408,2422,2429,2436,2443,2457,2464,2471,2478,2492,2499,2506,2513,2527,2534,2541,2548,2562,2
569,2576,2583,2597,2604,2611,2618,2632,2639,2646,2653,2667,2674,2681,2688,2702,2709,2716,2723,2737,2744,2751,
2758,2772,2779,2786,2793,2807,2814,2821,2828,2842,2849,2856,2863,2877,2884,2891,2898,2912,2919,2926,2933,294
7,2954,2961,2968,2982,2989,2996,3003,3017,3024,3031,3038,3052,3059,3066,3073,3087,3094,3101,3108,3122,3129,31
36,3143,3157,3164,3171,3178,3192,3199
```

1. 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 [3]:
```
fname = input("Input your First Name : ")
lname = input("Input your Last Name : ")
print ("Good Day. Hello " + lname + " " + fname + " !!!!")
```

```
Input your First Name : Sreekanth
Input your Last Name : Boya
Good Day. Hello Boya Sreekanth !!!!
```

1. Write a Python program to find the volume of a sphere with diameter 12 cm. Formula: V=4/3 π r

In [4]:
```
pi = 3.1415926535897931
d = 12
r = d/2

V= 4.0/3.0*pi* r**3
4
print('The volume of the sphere is: ', V)
```

```
The volume of the sphere is:  904.7786842338603
```