

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

```
In [1]: print('Hello World')

Hello World

In [2]: num1=25
num2=30
a=num1+num2
print('Sum of {0} and {1} is {2} '.format(num1,num2,a))

Sum of 25 and 30 is 55
```

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 [3]: x=2000
y=3200

n=[i for i in range(x,y+1) if(i%7==0 and i%5!=0)]
print(n)

[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]
```

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 [4]: frstname=input("First name: ")
lastname=input("Last name: ")

print(lastname+' '+frstname)

First name: Jaydeep
Last name: Biswas
Biswas Jaydeep
```

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

```
In [5]: pi = 3.14159265358
r= 6.0
V= 4.0/3.0*pi* r**3
print('Volume of the sphere is= ', V)

Volume of the sphere is= 904.77868423104
```

Task 2:

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

```
In [6]: values = input("Put the comma seprated numbers : ")
list = values.split(",")
print('List : ',list)

Put the comma seprated numbers : 2,4,6,8,10,9,3
List :  ['2', '4', '6', '8', '10', '9', '3']
```

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

```
In [7]: 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('')

*
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```

1. Write a Python program to reverse a word after accepting the input from the user. Sample Output: Input word: AcadGild
Output: dilGdacA

```
In [10]: word = input("Write a word : ")
for char in range(len(word)-1 , -1, -1):
    print(word[char], end="")
print('')

Write a word : AcadGlid21january
yraunaj12dilGdacA
```

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 [9]: print('''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''')

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
```