

Assignment 1

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

```
In [1]: a = int(input("enter first number: "))
        b = int(input("enter second number: "))

        sum = a + b

        print("sum:", sum)

enter first number: 23
enter second number: 34
sum: 57
```

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.

```
In [6]: a=[]
        for x in range(2000, 3201):
            if (x%7==0) and (x%5!=0):
                a.append(str(x))
        print(','.join(a))

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 the reverse order with a space between first name and last name.

```
In [11]: first = input("Input your First Name :")
        last = input("Input your Last Name :")
        print (last+" "+first)

Input your First Name :Deb
Input your Last Name :Bose
Bose Deb
```

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

```
In [19]: ## V = 4/3 × π × r³ = π × d³/6.*
pi = 3.1415926535897931
d= 12.0
r =d/2
V= (4.0/3.0)*pi*r*r*r
print('The volume of a sphere is: ',V )

The volume of a sphere is: 904.7786842338604
```

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

```
In [22]: values = input("enter sequence of comma seprated numbers : ")
l = values.split(",")
print('List :',l)

enter sequence of comma seprated numbers : 11,13,15,19,29,31,35
List : ['11', '13', '15', '19', '29', '31', '35']
```

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

• *

•

```
In [13]: rows = input("Enter max star to be displayed on single line")
rows = int (rows)
for i in range (0, rows):
    for j in range(0, i + 1):
        print("*", end=' ')
    print("\n")

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

```
Enter max star to be displayed on single line5
*
* *
* * *
* * * *
* * * * *
* * * *
* * *
* *
*
```

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

```
In [4]: word = input("Input word:")

for char in range(len(word) - 1, -1, -1):
    print(word[char], end="")
```

```
Input word:AcadGild
dliGdacA
```

8. 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 [11]: print("WE, THE PEOPLE OF INDIA, \n\thaving solemnly resolved to constitute India in  
to a SOVEREIGN,! \n\t\tSOCIALIST, SECULAR, DEMOCRATIC REPUBLIC \n\t\tand 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
```

```
In [ ]:
```