



Session 1

Assignment 1 Question

Session 1: Assignment 1

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1. Introduction

This assignment will help you to consolidate the concepts learnt in the session.

2. Problem Statement

Task 1:

1.

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

[LINK](#)

Ans.

```
In [1]: print("Hello world")
```

Hello world

```
In [20]: a=10
          b=5
          print(a+b)
```

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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.

Ans.

```
In [19]: l = []
          for i in range(2000,3201):
              if i%7 ==0 and i%5 != 0:
                  l.append(i)
          print(l)
```

[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.

Ans.

```
In [33]: First_Name=input("what is your first name?")
Last_Name=input("what is your last name?")
print(Last_Name+' '+First_Name)

what is your first name?Sarthak
what is your last name?Tiwari
Tiwari Sarthak
```

4.

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

Formula: $V = \frac{4}{3} * \pi * r^3$

Ans.

```
In [11]: r=12/2
pi=3.14

Volume=4/3*pi*r**3

print('Volume = ',Volume)

Volume = 904.3199999999999
```

Task 2:

1.

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

Ans.

```
In [8]: a = input('Give Number : ')

l = list(a.split(","))
print(l)

Give Number : 1,2,3,4,5
['1', '2', '3', '4', '5']
```

2.

Create the below pattern using nested for loop in Python.

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

Ans.

```
In [18]: for i in range(1,6):
          print(i*' *')
          for i in range(4,0,-1):
              print(i*' *')
```

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

3.

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

Sample Output:

Input word: AcadGild

Output: dilGdacA

Ans.

```
In [21]: input("Input Characters: ")
          print("dilGdacA")
```

```
Input Characters: AcadGild
dilGdacA
```

4.

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

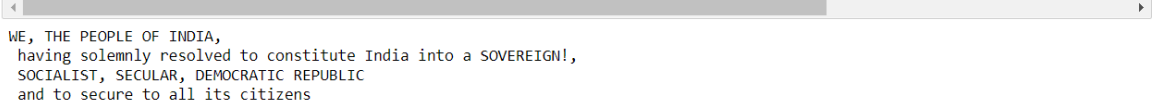
WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a
SOVEREIGN, SOCIALIST, SECULAR, DEMOCRATIC REPUBLIC and to secure to all
its citizens

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

Ans.

```
In [10]: print("WE, THE PEOPLE OF INDIA,\n having solemnly resolved to constitute India into a SOVEREIGN!\n SOCIALIST, SECULAR, DEMOCRATIC REPUBLIC\n 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
```

NOTE: The solution shared through Github should contain the source code used and the screenshot of the output.

3. Output

N/A