

# assignment1

May 3, 2020

Task 1:

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

```
[1]: print("Hello broken link")
```

Hello broken link

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.

```
[12]: r = []

for i in range(2000, 3201):
    if i % 7 == 0 and i % 5 != 0:
        r.append(i)

print(*r, sep=",")
```

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.

```
[1]: first_name = input("First Name:")
last_name = input("Last Name:")
print(last_name, first_name)
```

Last First

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

```
[3]: from math import pi
d = 12
r = d / 2
V = 4/3 * pi * r ** 3
print(V)
```

904.7786842338603

Task 2:

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

```
[4]: data = input().split(',')
print(data)
```

['1', '2', '3']

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

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

```
[7]: for i in range(5):
    print('* ' * (i + 1))
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

```
[11]: word = list(input("Input word:"))  
word.reverse()  
print("Output:", "".join(word))
```

Output: cba

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

```
[13]: 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