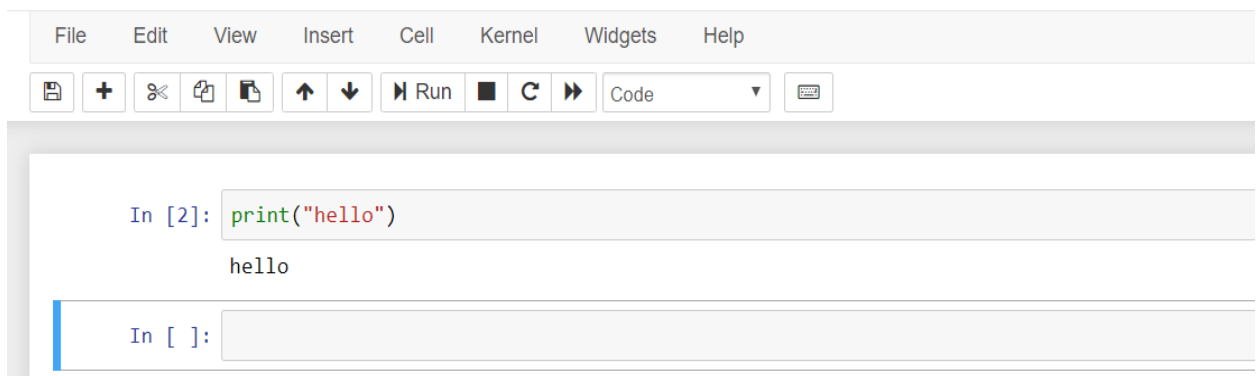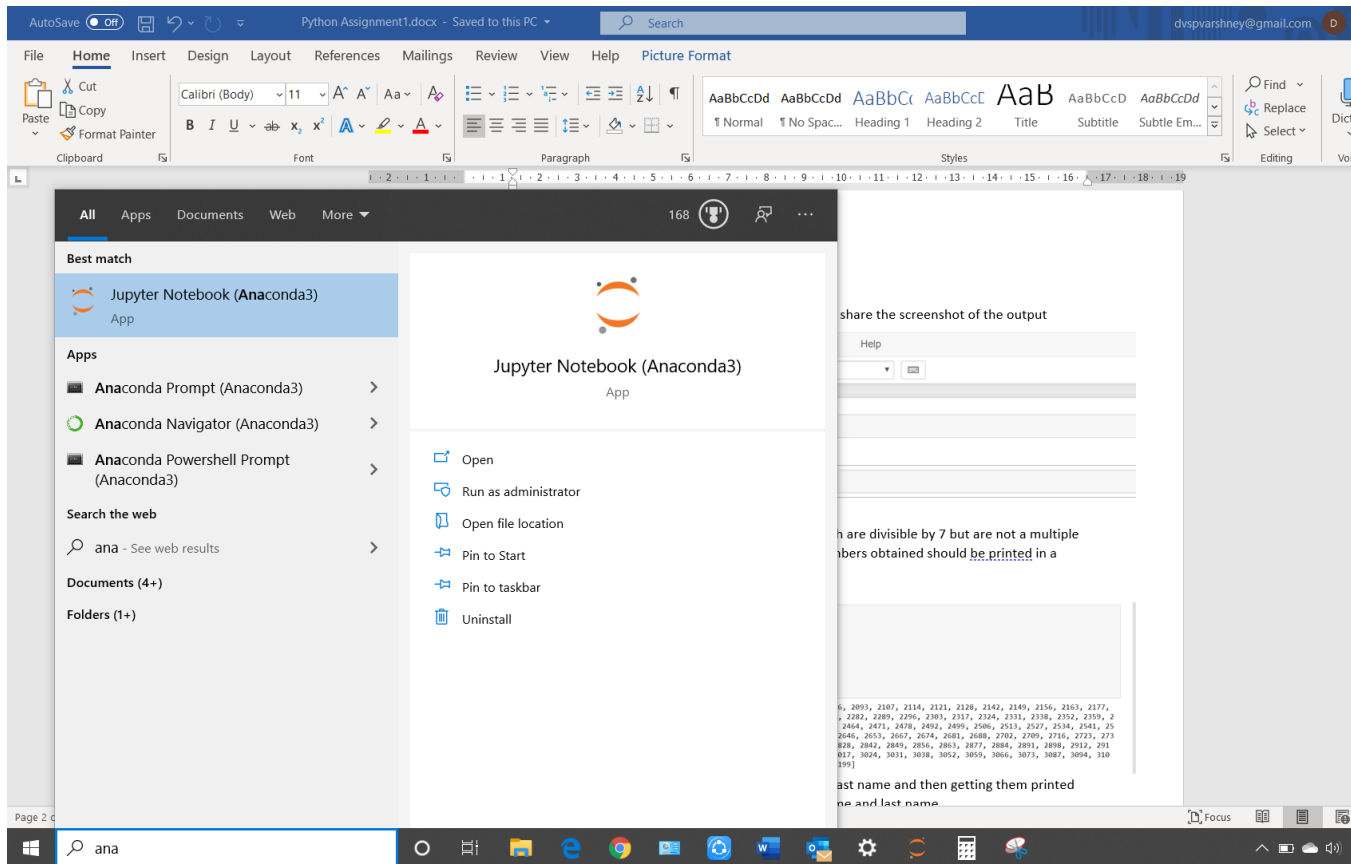# Python Assignment1

Submitted By: **Dheeraj Varshney**

Task1

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

Anaconda is shown in the system after installation.

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 [30]: m=[]

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

         # m
         print(m,end="")
```

```
[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, 2
366, 2373, 2387, 2394, 2401, 2408, 2422, 2429, 2436, 2443, 2457, 2464, 2471, 2478, 2492, 2499, 2506, 2513, 2527, 2534, 2541, 25
48, 2562, 2569, 2576, 2583, 2597, 2604, 2611, 2618, 2632, 2639, 2646, 2653, 2667, 2674, 2681, 2688, 2702, 2709, 2716, 2723, 273
7, 2744, 2751, 2758, 2772, 2779, 2786, 2793, 2807, 2814, 2821, 2828, 2842, 2849, 2856, 2863, 2877, 2884, 2891, 2898, 2912, 291
9, 2926, 2933, 2947, 2954, 2961, 2968, 2982, 2989, 2996, 3003, 3017, 3024, 3031, 3038, 3052, 3059, 3066, 3073, 3087, 3094, 310
1, 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 [9]:  a = input("Enter first name ")
         b = input("Enter last name ")

         c =a + " " + b
         c[::-1]
```

```
Enter first name Dheeraj
Enter last name Varshney
```

```
Out[9]: 'yenhsraV jareehD'
```

```
In [ ]:
```

4. Write a Python program to find the volume of a sphere with diameter 12 cm. Formula: V=4/3 * $\pi * r3$

```
In [13]:  d = 12
          r = d/2
          pi = 3.14
          A = 4/3* pi*r*r*r
          print("Area of sphere is:" , A)
```

```
Area of sphere is: 904.3199999999998
```

Task 2:

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

```
In [21]: a = input("Enter comma separated values ")
         print(a.split(","))

         Enter comma separated values 3,4,5,6,66,7
         ['3', '4', '5', '6', '66', '7']
```

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

```
In [27]: rows = int(input("Enter max star to be display on single line "))
         for i in range(0, rows):
             for j in range(0, i + 1):
                 print("*", end=' ')
             print("\r")

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

         Enter max star to be display on single line 5
         *
         * *
         * * *
         * * * *
         * * * * *
         * * * *
         * * *
         * *
         *
```

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

```
In [29]: a = input("Enter the string ")
         a[::-1]

         Enter the string AcadGild

Out[29]: 'dliGdacA'

In [ ]:
```

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

Code:
```python
print("WE,THE PEOPLE OF INDIA,\n\thaving solemnly resolved to constitute India into a SOVEREIGN,! \n\t\tSOCIALIST, SECULAR, DEMOCRATIC REPUBLIC \n\t\t\tand to secure to all its citizens")
```

```
In [40]: to constitute India into a SOVEREIGN,! \n\t\tSOCIALIST, SECULAR, DEMOCRATIC REPUBLIC \n\t\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 [ ]:
```