

# Assignment -1

## Python Programming

Assignment Date	02 November 2022
Student Name	Ms. Madhubala R
Student Roll Number	412419205049
Maximum Marks	2 Marks

### Question-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.

The screenshot shows the Spyder IDE interface. On the left, the code editor displays a file named 'temp.py' with the following content:

```
1 l=[]
2 for i in range(2000, 3201):
3     if (i%7==0) and (i%5!=0):
4         l.append(str(i))
5
6
7
8 print (', '.join(l))
```

On the right, the IPython console window shows the output of the code execution. It starts with a help dialog box, then displays the command runfile followed by a long list of numbers separated by commas, representing the sequence of numbers that meet the given criteria.

```
In [1]: runfile('C:/Users/TEST/spyder-py3/temp.py', wdir='C:/Users/TEST/.spyder-py3')
2002,2009,2016,2023,2037,2044,2051,2058,2072,2079,2086,2093,2107,2114,2121,2128,2142,2149,21
56,2163,2177,2184,2191,2198,2212,2219,2226,2233,2247,2254,2261,2268,2282,2289,2296,2303,2317
,2324,2331,2338,2352,2359,2366,2373,2387,2394,2401,2408,2422,2429,2436,2443,2457,2464,2471,2
478,2492,2499,2506,2513,2527,2534,2541,2548,2562,2569,2576,2583,2597,2604,2611,2618,2632,26
9,2646,2653,2667,2674,2681,2688,2702,2709,2716,2723,2737,2744,2751,2758,2772,2779,2786,2793,
2807,2814,2821,2828,2842,2849,2856,2863,2877,2884,2891,2898,2912,2919,2926,2933,2947,2954,29
61,2968,2982,2989,2996,3003,3017,3024,3031,3038,3052,3055,3063,3073,3087,3094,3101,3108,3122
,3129,3136,3143,3157,3164,3171,3178,3192,3199
```

The IPython console also shows the command In [2]: at the bottom.

## Question-2:

With a given integral number n, write a program to generate a dictionary that contains (i, i\*i) such that is an integral number between 1 and n (both included). and then the program should print the dictionary.

Suppose the following input is supplied to the program:

8

Then, the output should be:

{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64}

The screenshot shows the Spyder IDE interface. On the left, there is a code editor window titled 'temp.py' containing the following Python code:

```
C:\Users\Welcome\spyder-py3\temp.py
temp.py X
1
2
3 n=int(input())
4 d=dict()
5 for i in range(1,n+1):
6     d[i]=i*i
7
8
9
10 print (d)
11
12
13
```

To the right of the code editor is a 'Console' window. It displays the Python environment information:

Source Console Object Usage  
Here you can get help of any object by pressing **Ctrl+H** in front of it, either on Help Variable Explorer Plots Files

Python 3.9.7 (default, Sep 16 2021, 16:59:28) [MSC v.1916 64 bit (AMD64)]  
Type "copyright", "credits" or "license" for more information.  
IPython 7.29.0 -- An enhanced Interactive Python.

In [1]: runfile('C:/Users/Welcome/.spyder-py3/temp.py', wdir='C:/Users/Welcome/.spyder-py3')  
12  
{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81, 10: 100, 11: 121, 12: 144}  
In [2]: |

At the bottom of the interface, there is a status bar with the following information:

LSP Python: ready conda base (Python 3.9.7) Line 10, Col 1 UTF-8-GUESSED CRLF RW Mem 97%