

Assignment -1

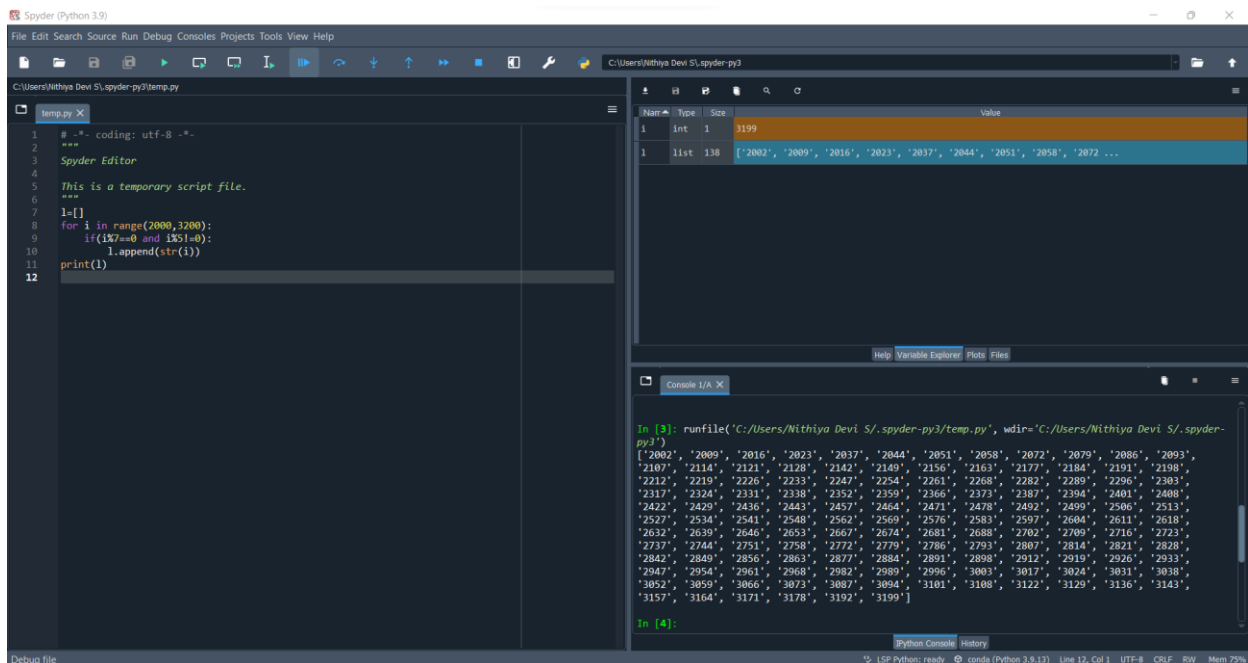
Python Programming

Assignment Date	23 October 2022
Student Name	NITHIYA DEVI S
Student Roll Number	412419205064
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.

Solution:



The screenshot shows the Spyder Python IDE interface. The left pane displays a Python script named 'temp.py' with the following code:

```
1 # -*- coding: utf-8 -*-
2 """
3 Spyder Editor
4 This is a temporary script file.
5 """
6
7 l=[]
8 for i in range(2000,3200):
9     if(i%7==0 and i%5!=0):
10         l.append(str(i))
11
12 print(l)
```

The right pane shows the Variable Explorer with a list variable 'l' of type 'list' and size 138. The value of 'l' is displayed as a list of strings: ['2002', '2009', '2016', '2023', '2037', '2044', '2051', '2058', '2072', ...]. The bottom pane shows the IPython console with the following output:

```
In [3]: runfile('C:/Users/Nithiya Devi S/.spyder-py3/temp.py', wdir='C:/Users/Nithiya Devi S/.spyder-py3')
['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']
```

The status bar at the bottom indicates the Python interpreter is ready and the file is 'temp.py'.

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.

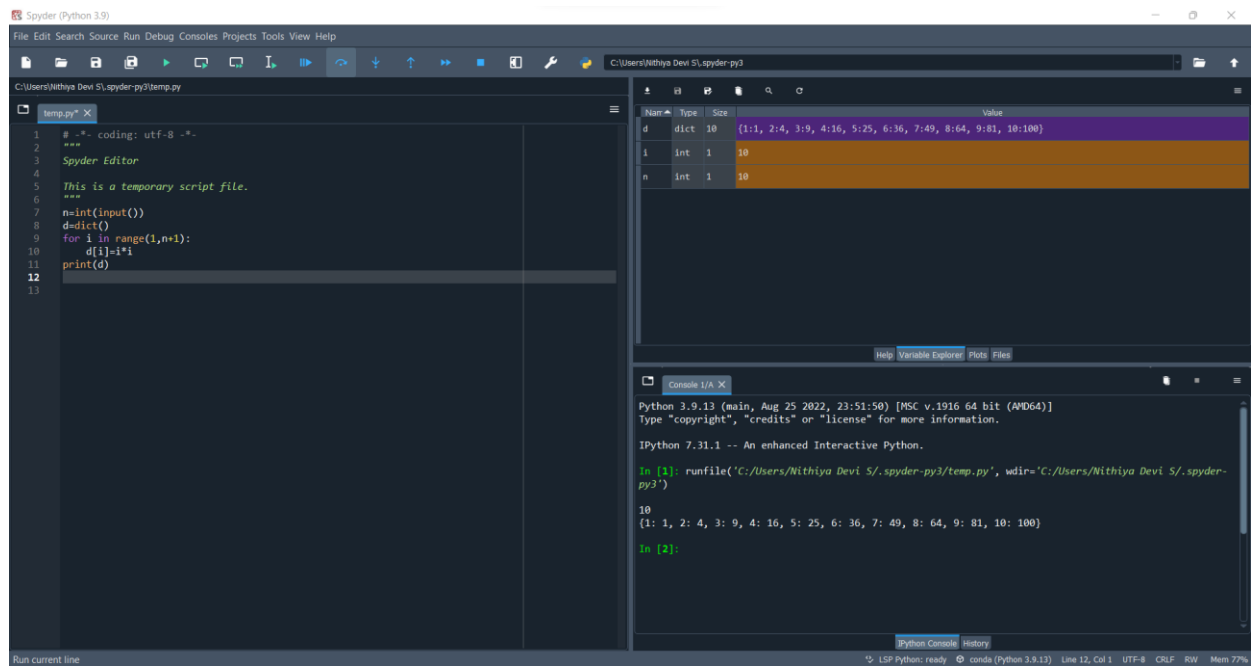
Suppose the following input is supplied to the program:

10

Then, the output will be:

{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81, 10: 100}

Source Code:



The screenshot displays the Spyder Python IDE interface. The main editor window shows a Python script named `temp.py` with the following code:

```
1 # -*- coding: utf-8 -*-
2 """
3 Spyder Editor
4 This is a temporary script file.
5 """
6
7 n=int(input())
8 d=dict()
9 for i in range(1,n+1):
10     d[i]=i*i
11 print(d)
12
13
```

The Variable Explorer on the right shows the variables defined in the script:

Name	Type	Size	Value
d	dict	10	{1:1, 2:4, 3:9, 4:16, 5:25, 6:36, 7:49, 8:64, 9:81, 10:100}
i	int	1	10
n	int	1	10

The IPython Console at the bottom shows the execution of the script:

```
Python 3.9.13 (main, Aug 25 2022, 23:51:50) [MSC v.1916 64 bit (AMD64)]
Type "copyright", "credits" or "license()" for more information.

IPython 7.31.1 -- An enhanced Interactive Python.

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

In [2]:
```

The status bar at the bottom indicates the current line is 12, column 1, and the memory usage is 77%.