

## Assignment -1

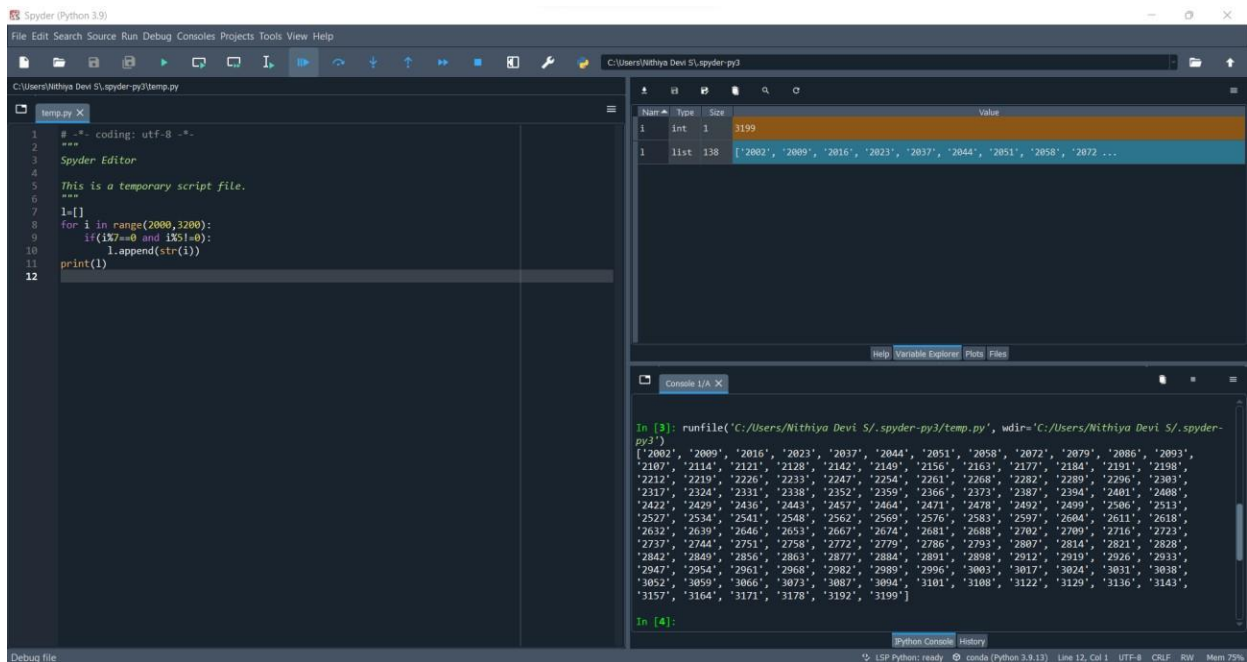
### Python Programming

Assignment Date	23 October 2022
Student Name	ANITHA
Student Roll Number	950919104001
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
5 This is a temporary script file.
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' containing 138 elements. Below it, the IPython console displays the output of the script as a long list of numbers in quotes, separated by commas.

#### 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.

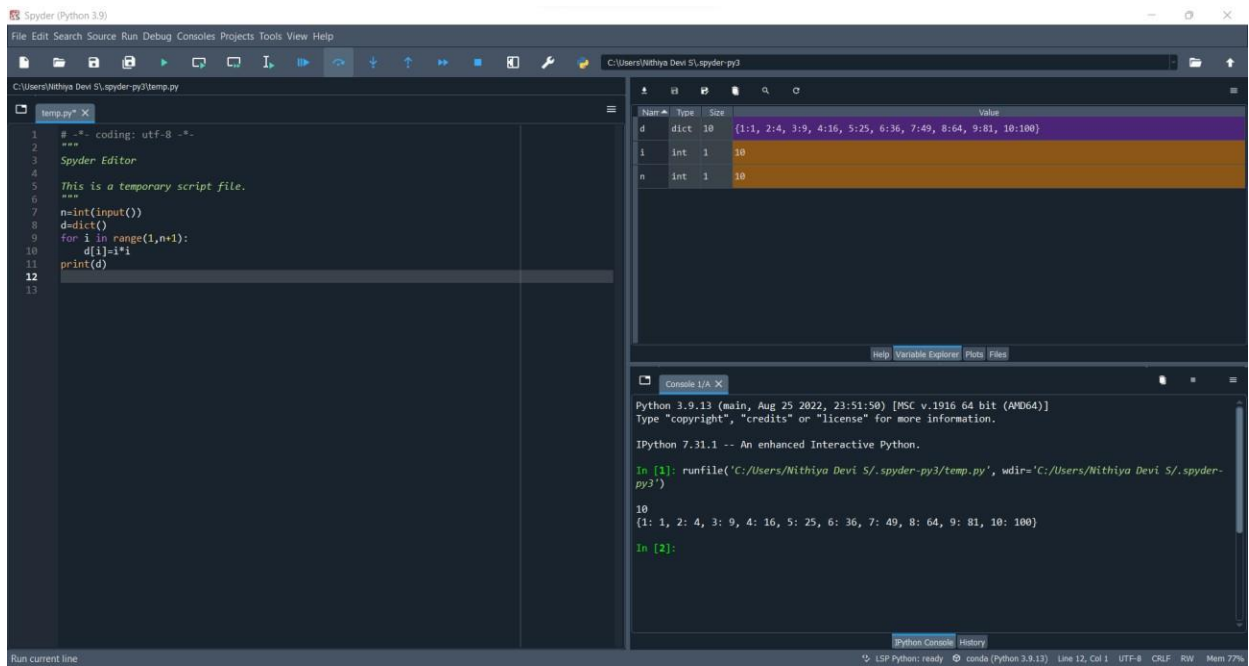
Suppose the following input is supplied to the program:

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 shows a Python script in a file named `temp.py`. The script prompts the user for an integer `n` and calculates the sum of squares of integers from 1 to `n`, storing the result in a dictionary `d`.

```
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 state of the program's variables:

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 history:

```
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, with UTF-8 encoding and 77% memory usage.