

## Assignment -1

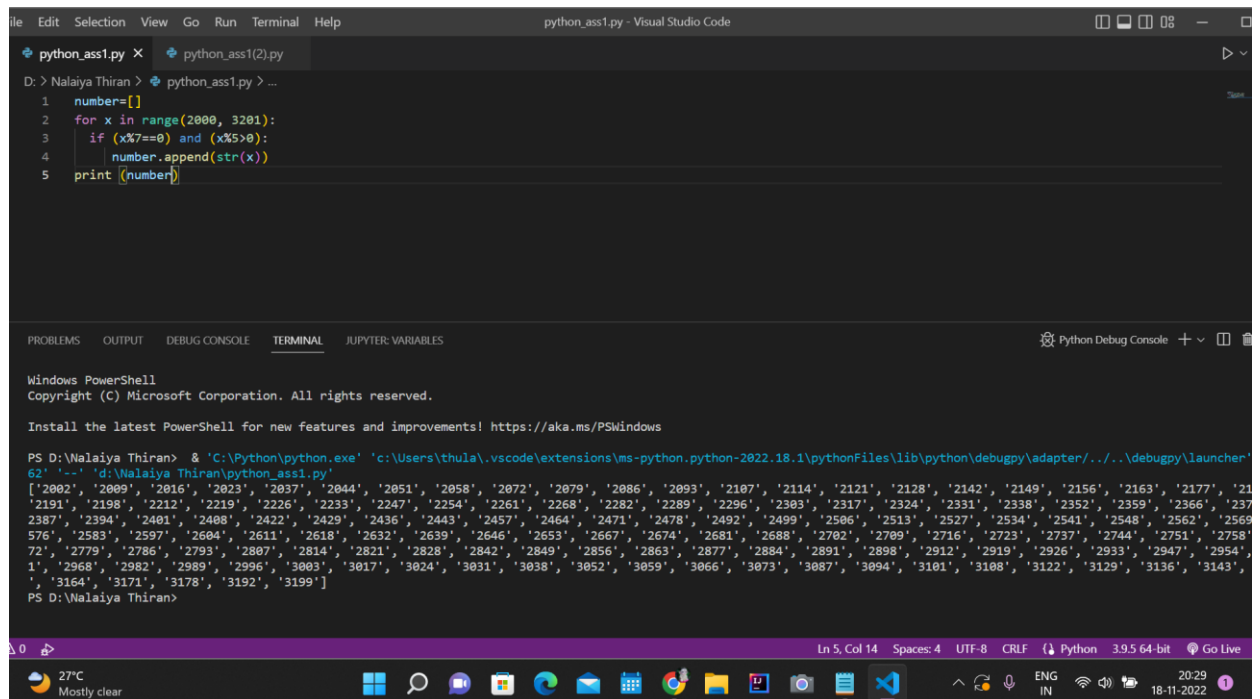
### Python Programming

Assignment Date	23 September 2022
Student Name	VASUNDHRA S
Student Roll Number	312319205183
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:



```
python_ass1.py X python_ass1(2).py
D:\> Nalaiya Thiran > python_ass1.py > ...
1 number=[]
2 for x in range(2000, 3201):
3     if (x%7==0) and (x%5!=0):
4         number.append(str(x))
5 print(number)
```

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER VARIABLES
Windows PowerShell
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PS D:\Nalaiya Thiran> & 'C:\Python\python.exe' 'c:\Users\thula\.vscode\extensions\ms-python.python-2022.18.1\pythonFiles\lib\python\debugpy\adapter\..\..\debugpy\launcher'
62' '--' 'd:\Nalaiya Thiran\python_ass1.py'
['2002', '2009', '2016', '2023', '2037', '2044', '2051', '2058', '2072', '2079', '2086', '2093', '2107', '2114', '2121', '2128', '2142', '2149', '2156', '2163', '2177', '21
2191', '2198', '2212', '2219', '2226', '2233', '2247', '2254', '2261', '2268', '2282', '2289', '2296', '2303', '2317', '2324', '2331', '2338', '2352', '2359', '2366', '237
2387', '2394', '2401', '2408', '2422', '2429', '2436', '2443', '2457', '2464', '2471', '2478', '2492', '2499', '2506', '2513', '2527', '2534', '2541', '2548', '2562', '2569
576', '2583', '2597', '2604', '2611', '2618', '2632', '2639', '2646', '2653', '2667', '2674', '2681', '2688', '2702', '2709', '2716', '2723', '2737', '2744', '2751', '2758'
72', '2779', '2786', '2793', '2807', '2814', '2821', '2828', '2842', '2849', '2856', '2863', '2877', '2884', '2891', '2898', '2912', '2919', '2926', '2933', '2947', '2954',
1', '2968', '2982', '2989', '2996', '3003', '3017', '3024', '3031', '3038', '3052', '3059', '3066', '3073', '3087', '3094', '3101', '3108', '3122', '3129', '3136', '3143',
', '3164', '3171', '3178', '3192', '3199']
PS D:\Nalaiya Thiran>
```

#### 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.

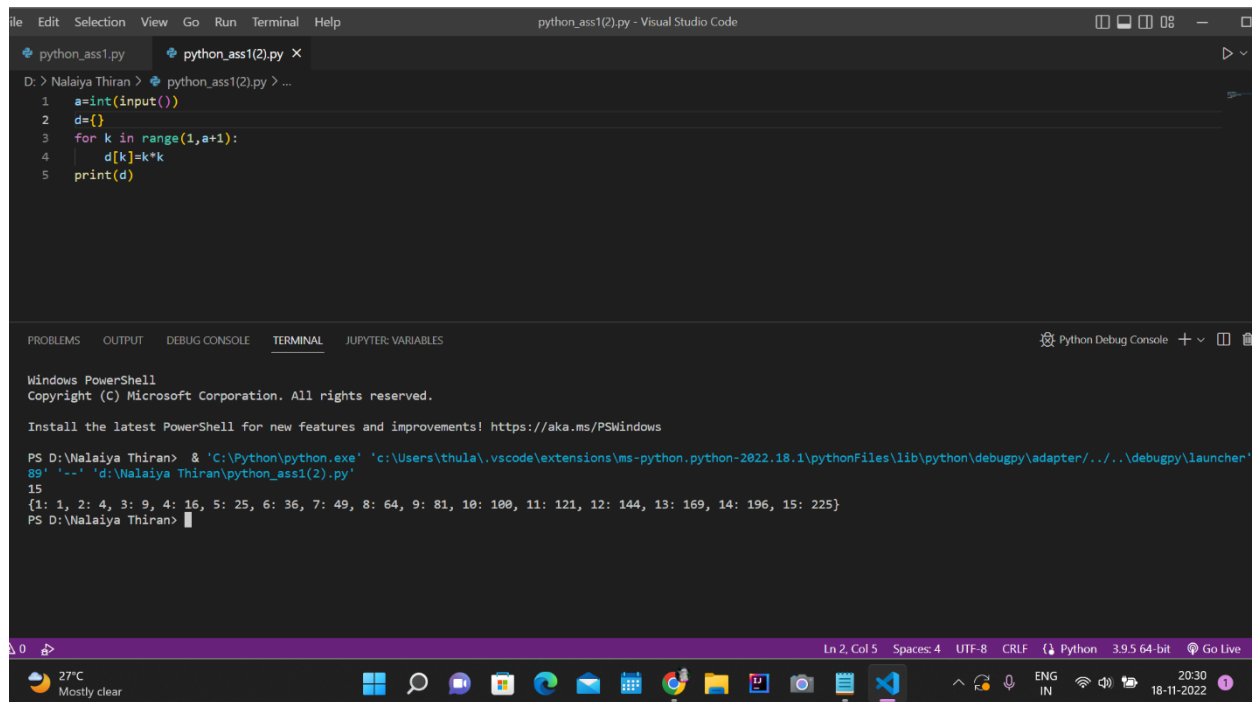
Suppose the following input is supplied to the program:

8

Then, the output should be:

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

## Solution:



The image shows a Visual Studio Code window with a Python file named `python_ass1(2).py` open. The code in the file is as follows:

```
1 a=int(input())
2 d={}
3 for k in range(1,a+1):
4     d[k]=k*k
5 print(d)
```

Below the editor, the **TERMINAL** tab is active, showing the execution of the script in a Windows PowerShell environment. The output is a dictionary with 15 key-value pairs, where the key is the number and the value is its square.

```
Windows PowerShell
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PS D:\Nalaiya Thiran> & 'C:\Python\python.exe' 'c:\Users\thula\.vscode\extensions\ms-python.python-2022.18.1\pythonFiles\lib\python\debugpy\adapter\..\..\debugpy\launcher'
89' '--' 'd:\Nalaiya Thiran\python_ass1(2).py'
15
{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81, 10: 100, 11: 121, 12: 144, 13: 169, 14: 196, 15: 225}
PS D:\Nalaiya Thiran>
```

The status bar at the bottom indicates the file is at line 2, column 5, with 4 spaces, using UTF-8 encoding and CRLF line endings. The system tray shows a temperature of 27°C, mostly clear weather, and the date and time as 20:30 on 18-11-2022.

