

Assignment -1

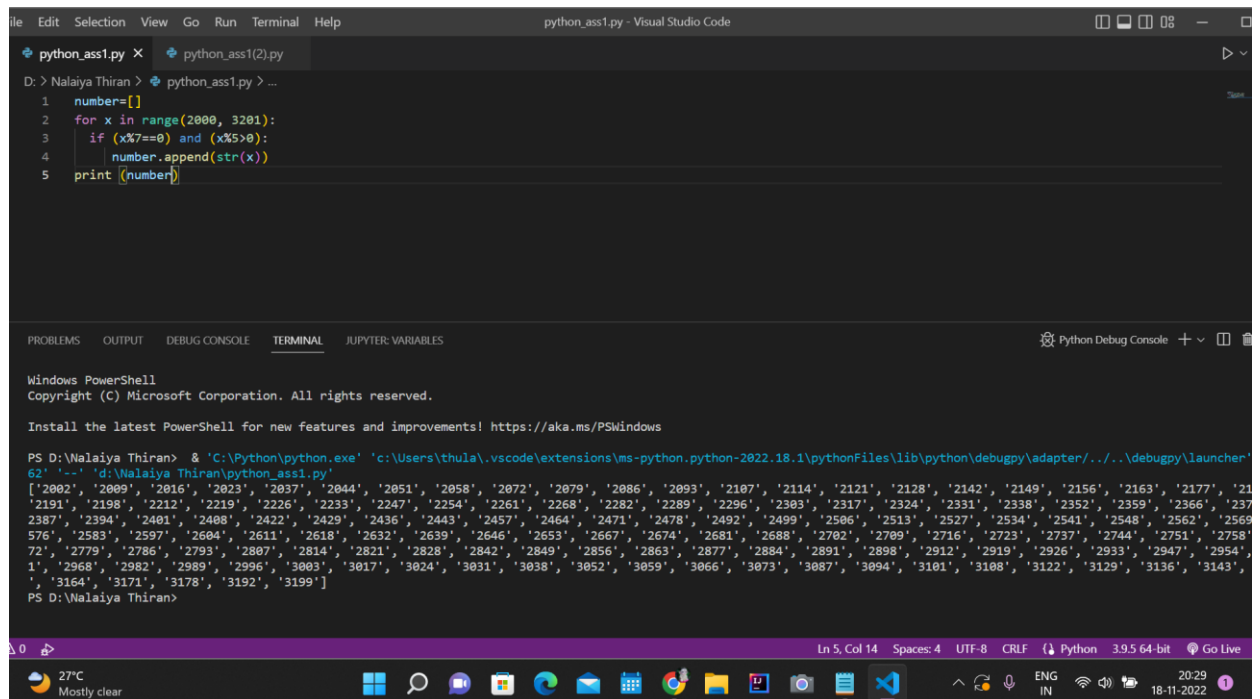
Python Programming

Assignment Date	23 September 2022
Student Name	SAI SRUTHI B
Student Roll Number	312319205137
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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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

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.

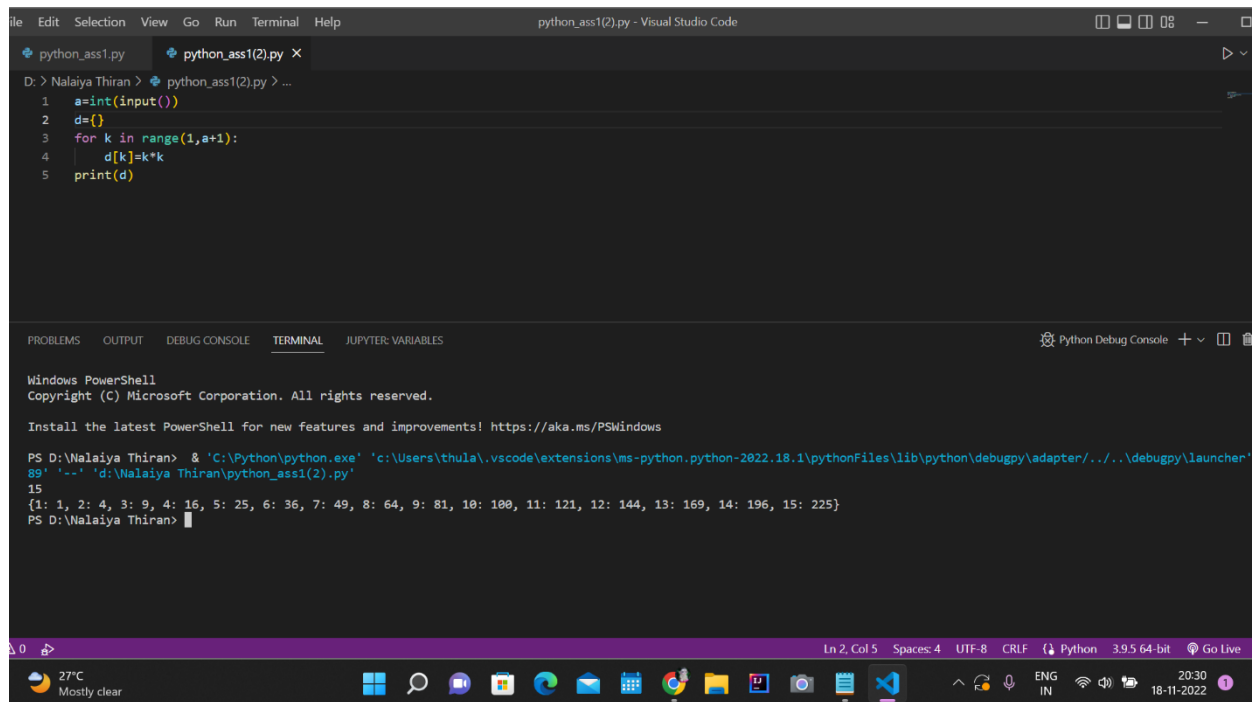
Suppose the following input is supplied to the program:

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 a Windows PowerShell session. The command executed is:

```
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'
```

The output of the script is:

```
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}
```

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 18-11-2022 at 20:30.

