

Assignment -1
Python Programming

Assignment Date	19 September 2022
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Maximum Marks	2 Marks

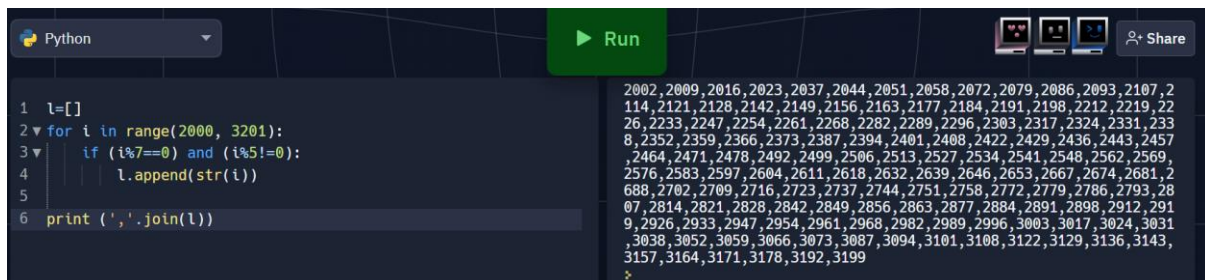
Question-1:

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:

```
l=[]
for i in range(2000, 3201):
    if (i%7==0) and (i%5!=0):
        l.append(str(i))

print(','.join(l))
#-----#
#-----#
```

A screenshot of a Python IDE interface. On the left, a code editor shows the following Python code:

```
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 print(','.join(l))
```

On the right, the output of the program is displayed as a long, single-line string of numbers separated by commas, starting from 2002 and ending at 3199. The output is: 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.

Question-2:

With a given integral number n, write a program to generate a dictionary that contains (i, i*i) such that i 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:

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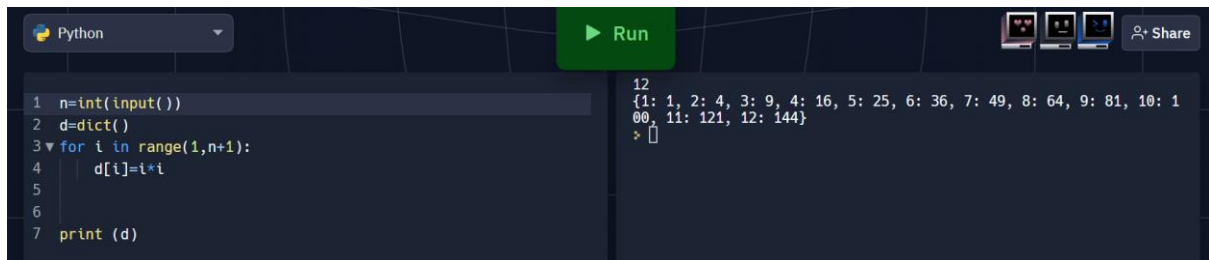
Then, the output should be:

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

Solution:

```
n=int(input())
d=dict()
for i in range(1,n+1):
    d[i]=i*i

print d
#-----#
#-----#
```

A screenshot of a Python IDE interface. The top bar shows 'Python' and a 'Run' button. The left pane contains the following code:

```
1 n=int(input())
2 d=dict()
3 for i in range(1,n+1):
4     d[i]=i*i
5
6
7 print (d)
```

The right pane shows the output of the code, which is a dictionary: {1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81, 10: 100, 11: 121, 12: 144}. The output is displayed on multiple lines, with the first line showing the dictionary and subsequent lines showing the keys and values separately.

```
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{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81, 10: 1
00, 11: 121, 12: 144}
>
```