

Assignment -1
Python Programming


Assignment Date	21 October 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:

```
lower = math.ceil(2000 / 7)
upper = math.floor(3201 / 7)
for i in range(lower, upper+1):
    if (7 * i) % 5 != 0:
        print(7 * i, end = ' ')
    else:
        continue
```



The screenshot shows a Python IDE with two tabs: 'question_1l.py' and 'Question_1.py'. The code in the editor is as follows:

```
3 lower = math.ceil(2000 / 7)
4 upper = math.floor(3201 / 7)
5 for i in range(lower, upper+1):
6     if (7 * i) % 5 != 0:
7
8         print(7 * i, end = ' ')
9     else:
10        continue
```

The 'Run' console at the bottom shows the command: `"C:\Program Files\Python39\python.exe" C:/Users/PC/Desktop/Project/TextFiles/Question_1.py`. The output is a long sequence of numbers: `2002 2009 2016 2023 2037 2044 2051 2058 2072 2079 2086 2093 2107 2114 2121 2128 2142 2149 2156 2163 2177 2184 2191 2198 2205`. The process finished with exit code 0.

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:

8

Then, the output should be:


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

Solution:

```
# Entering n:
n = int(input("Enter n: "))

dictionary = dict()
for i in range(1, n+1):
    dictionary[i] = i*i

print(dictionary)
```



The screenshot shows a Python IDE with a file named 'question_II.py'. The code in the editor is as follows:

```
1 # Entering n:
2 n = int(input("Enter n: "))
3
4 dictionary = dict()
5 for i in range(1, n+1):
6     dictionary[i] = i*i
7
8 print(dictionary)
```

Below the editor, the 'Run' output is displayed. It shows the command prompt execution of the script, where the user entered '5' for 'n', and the program outputted the dictionary {1: 1, 2: 4, 3: 9, 4: 16, 5: 25}. The process finished with exit code 0.

```
Run: question_II x
"C:\Program Files\Python39\python.exe" C:/Users/PC/Desktop/Project/TextFiles/question_II.py
Enter n: 5
{1: 1, 2: 4, 3: 9, 4: 16, 5: 25}
Process finished with exit code 0
```