**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.**

print(**"Following are numbers between 2000 and 3200 which are divisible by 7 but not 5: "**)  
count = 0  
**for** num **in** range(2000,3201):  
 **if** num % 7 == 0 **and** num % 5 != 0:  
 count += 1  
 print(num, end=**","**)  
print(**"\b"**) # Backspace  
print(**f"There are {**count**} numbers"**)

**2. Write a program which can compute the factorial of a given numbers.**

num = int(input(**"Enter a number: "**))  
# Using Functions  
**def** factorial(num):  
 **if** num == 0:  
 **return** 1  
 **return** num \* factorial(num-1)  
print(**f"Factorial of {**num**} is , {**factorial(num)**} Using Functions"**)  
  
# Using Lambda function  
**def** fact(num): **return** 1 **if** num<=0 **else** num \* fact(num-1)  
print(**f"Factorial of {**num**} is , {**factorial(num)**} Using Lambda function"**)  
  
# Using for loop  
fact = 1  
**for** i **in** range(1,num+1):  
 fact = fact \* i  
print(**f"Factorial of {**num**} is , {**fact**} Using for loop1"**)

**3. With a given integral number n, write a program to generate a dictionary that contains (i, i x 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}

num = int(input(**"Enter a number: "**))  
result = {i:i\*i **for** i **in** range(1,num+1)}  
print(result)  
# OR  
answer = {}  
**for** i **in** range(1,num+1):  
 answer[i] = i\*i  
print(answer)

**4. Write a program which accepts a sequence of comma-separated numbers from console and generate a list and a tuple which contains every number.Suppose the following input is supplied to the program: 34,67,55,33,12,98**

**Then, the output should be:**

**['34', '67', '55', '33', '12', '98']**

**('34', '67', '55', '33', '12', '98')**

numbers = input(**"Enter numbers:"**).split(**','**)  
print(list(numbers))  
print(tuple(numbers))

**5. Define a class which has at least two methods:**

* **getString: to get a string from console input**
* **printString: to print the string in upper case.**

**class** string():  
 **def** \_\_init\_\_(self):  
 **self.s = ''**

**def** getString(self):  
 self.s = input(**"Enter a string: "**)  
  
 **def** printString(self):  
 print(**f"String in Upper Case : {**self.s.upper()**}"**)  
  
str = string()  
str.getString()  
str.printString()