**Question 1: Please write a program using generator to print the numbers which can be divisible by 5 and 7 between 0 and n in comma separated form while n is input by console.**

**Example:  
If the following n is given as input to the program:100  
Then, the output of the program should be: 0,35,70**

def generator(n):  
 for i in range(n+1):  
 if(i%35==0): *#if a no is divisible by a and b then it should be divisible by a\*b*   
 yield i  
n=int(input())  
values=[str(i) for i in generator(n)]  
print(",".join(values))

**Question 2: Please write a program using generator to print the even numbers between 0 and n in comma separated form while n is input by console.**

**Example: If the following n is given as input to the program: 10  
Then, the output of the program should be: 0,2,4,6,8,10**

def generator(n):  
 for i in range(n+1):  
 if(i%2==0):  
 yield i  
n=int(input())  
values=[str(i) for i in generator(n)]  
print(",".join(values))

**Question 3: The Fibonacci Sequence is computed based on the following formula:**

**f(n)=0 if n=0  
f(n)=1 if n=1  
f(n)=f(n-1)+f(n-2) if n>1**

**Please write a program using list comprehension to print the Fibonacci Sequence in comma separated form with a given n input by console.**

**Example:  
If the following n is given as input to the program:7  
Then, the output of the program should be:  
0,1,1,2,3,5,8,13**

def fib(a):  
 if(a<=1):  
 return a  
 else:  
 return (fib(a-1)+fib(a-2))  
n=int(input())  
if(n<=0):  
 print("Invalid No")  
else:  
 for i in range(n):  
 print(fib(i))

**Question 4: Assuming that we have some email addresses in the "**[**username@companyname.com**](mailto:username@companyname.com)**" format, please write program to print the user name of a given email address. Both user names and company names are composed of letters only.**

**Example:  
If the following email address is given as input to the program:** [**john@google.com**](mailto:john@google.com)  
**Then, the output of the program should be:  
john**

import re  
email=input()  
pattern="(\w+)@((\w+\.)+(com))"  
ans=re.match(pattern,email)  
print(ans.group(1))

**Question 5: Define a class named Shape and its subclass Square. The Square class has an init function which takes a length as argument. Both classes have a area function which can print the area of the shape where Shape's area is 0 by default.**

class shape():  
 def \_\_init\_\_(self,l):  
 self.length=l  
 def area(self):  
 return 0  
class square(shape):  
 def \_\_init\_\_(self,l):  
 shape.\_\_init\_\_(self,l)  
 self.length=l  
 def area(self):  
 return self.length\*self.length  
Square=square(float(input()))  
print(Square.area())