1.How many seconds are in an hour? Use the interactive interpreter as a calculator and multiply the number of seconds in a minute (60) by the number of minutes in an hour (also 60).

Ans. 360 0

2. Assign the result from the previous task (seconds in an hour) to a variable called seconds\_per\_hour.

Ans:3600 seconds\_ per\_ hour

3. How many seconds do you think there are in a day? Make use of the variables seconds per hour and minutes per hour.

Ans:3600\*24 secs

4. Calculate seconds per day again, but this time save the result in a variable called seconds\_per\_day

Ans:seconds\_per\_day=3600\*24=86400

5. Divide seconds\_per\_day by seconds\_per\_hour. Use floating-point (/) division.

Ans:24.0

6. Divide seconds\_per\_day by seconds\_per\_hour, using integer (//) division. Did this number agree with the floating-point value from the previous question, aside from the final .0?

Ans:Yes

7. Write a generator, genPrimes, that returns the sequence of prime numbers on successive calls to its next() method: 2, 3, 5, 7, 11, ...

Ans: def gen\_primes(n):  
 for i in range(n + 1):  
 if i%2!=0 and i%3!=0 and i%5!=0 and i%7!=0:  
 yield i  
  
n = int(input("enter the console input"))  
values = ['2','3','5','7']  
for i in gen\_primes(n):  
 values.append(str(i))  
print("the prime nos for the console input are ")  
values.remove('1')  
print(",".join(values))