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).

(60 \*60 ) \* 60

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

second\_per\_hour = ( 60 \* 60 ) \* 60

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

( (60 \* 60 ) \* 60 ) \* 24

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

second\_per\_day = ( (60 \* 60 ) \* 60 ) \* 24

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

second\_per\_day / second\_per\_hour

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?

second\_per\_day // second\_per\_hour

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

def getPrimes(n):  
 for num in range(1, n):  
 primenumber = True  
 for d in range(2, num):  
 if num % d == 0:  
 primenumber = False  
 if primenumber:  
 yield num  
  
  
for i in getPrimes(100):  
 print(i)