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, 8, 13, ...

def getPrimes(n):  
 a = 0  
 b = 1  
 c = 0  
 while c < n:  
 c = a + b  
 yield c  
 a = b  
 b = c  
  
  
for i in getPrimes(10):  
 print(i)