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).

Answer> 60\*60

= 3600

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

Answer> seconds\_per\_hour = 3600

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

Answer> seconds\_per\_hour/minutes\_per\_hour \*60\*24

= 86400

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

Answer> seconds\_per\_day = seconds\_per\_hour \*24

= 3600

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

Answer> seconds\_per\_day / seconds\_per\_hour

= 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?

Answer> seconds\_per\_day // seconds\_per\_hour

= 24

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

Answer>

def genPrimes():

primes = []

n = 2

last = n

while True:

for i in primes:

if n % i == 0:

n += 1

break

else:

primes.append(n)

last = n

n += 1

yield last

p = genPrimes()