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).

sol. 60

A:

60\*60

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

seconds\_per\_hour.

A: 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.  
A:

seconds\_per\_hour\*24

minutes\_per\_hour=60

minutes\_per\_hour\*24

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

A:

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

seconds\_per\_day

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

A:

seconds\_per\_day/seconds\_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?

A:

seconds\_per\_day // seconds\_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, ...

A:

def genPrimes():

n = 0

while True:

if n == 2 or n == 3 :

yield n

elif ((n-1)%6 == 0 or (n+1)%6 == 0) and n !=1:

yield n

n = n+1

output = genPrimes()

for ele in range(10):

print(next(output))