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

Ans:- 60\*60

3600

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

Ans:- 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.

Ans:- minutes\_per\_hour = 60

seconds\_per\_hour\*24

86400

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

Ans:- seconds\_per\_day = seconds\_per\_hour\*24

seconds\_per\_day

86400

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

Ans:- 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?

Ans:- 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, ...

Ans:- **def** getPrimes():

prime = []

n = 2

**while** **True**:

**for** i **in** prime:

**if** n%i==0:

**break**

**else**:

prime.append(n)

**yield** n

n=n+1

generator = getPrimes()

next(generator)

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