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).

**Ans.. hour = 1**

**min=hour\*60**

**seconds\_per\_hour=min\*60**

**print(seconds\_per\_hour)**

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

**Ans. hour = int(input("Input time in Hours: "))**

**min=hour\*60**

**seconds\_per\_hour=min\*60**

**print(seconds\_per\_hour)**

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. hour=24**

**minutes \_per\_hour=hour\*60**

**seconds\_per\_hour= minutes \_per\_hour\*60**

**print(seconds\_per\_hour)**

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

**Ans. . days = int(input("Input time in Days: "))**

**hour=days\*24**

**min\_per\_hour=hour\*60**

**seconds\_per\_day=min\_per\_hour\*60**

**print(seconds\_per\_day)**

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

**Ans. seconds\_per\_day =24\*60\*60**

**seconds\_per\_hour=60\*60**

**Div= 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?

**Ans. Div= seconds\_per\_day/ seconds\_per\_hour**

**Yes, this number will agree.**

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 genPrimes():**

**primes = [] # primes generated so far**

**last = 1 # last number tried**

**while True:**

**last += 1**

**for p in primes:**

**if last % p == 0:**

**break**

**else:**

**primes.append(last)**

**yield last**

**# Next line code to print the result according to user demand :**

**l=genPrimes()**

**count=int(input("How many prime nos. you want to print "))**

**for i in range(count):**

**print (l.\_\_next\_\_())**