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).

In [3]:

```
print(60*60)
```

```
3600
```

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

In [4]:

```
seconds_per_hour = 60*60
print(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.

In [5]:

```
minutes_per_hour = 60
print(seconds_per_hour*24)
```

```
86400
```

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

In [6]:

```
seconds_per_day = 24*60*60
print(seconds_per_day)
```

```
86400
```

5. Divide seconds_per_day by seconds_per_hour. Use floating-point (/) division.

In [7]:

```
print(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?

In [8]:

```
print(seconds_per_day//seconds_per_hour, end='')
print(' -> yes this values agree with the floating point value from the previou
```

```
24 -> yes this values agree with the floating point value from the previous q
uestion
```

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

In [9]:

```
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(5):
    print(next(output))
```

```
2
3
5
7
11
```

In [ ]:

In [ ]: