**PYTHON BASIC ASSIGNMENT\_15 - SUBMITTED BY SAMUEL DEVDAS**

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. 3600 seconds are present in an hour.

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

Ans. seconds\_per\_hour=60\*60

print(seconds)

Output: 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. 86400 seconds are present a day.

minutes\_per\_hour=60

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

seconds\_per\_day=hours\_per\_day\*seconds\_per\_hour

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

seconds\_per\_day=hours\_per\_day\*seconds\_per\_hour

print(seconds\_per\_day)

Output: 86400

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

Ans. seconds\_per\_day/seconds\_per\_hour

Output: 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 #Yes, it agrees with floating point value from previous question.

Output: 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. p=[]

for num in range(1,50):

if num>1:

for i in range(2,num):

if num%i==0:

break

else:

p.append(num)

def next():

return p.pop(0)