Programmers Journal - Unit 2 Lesson 2

Exercise 4-1

var1 = 5

var2 = 12

var3 = 16

average = (var1 + var2 + var3) / 3

print("The average is:", average)

We define the variables as 5, 12, 16

We calculate the average by adding them together and dividing by 3 and store it as “average”

We print the average with the print command

Exercise 4-2

radius = 10

pi = 3.14159

surfacearea= pi \* (radius \* \* 2)

print('The surface area of a circle with radius 10 is', surfacearea)

Exercise 4-3

amount = 450

dollars = amount // 100

remainder = amount % 100

quarters = remainder // 25

remainder = remainder % 25

dimes = remainder // 10

remainder = remainder % 10

nickels = remainder // 5

remainder = remainder % 5

pennies = remainder

print("Amount in cents:", amount)

print("Dollars:", dollars)

print("Quarters:", quarters)

print("Dimes:", dimes)

print("Nickels:", nickels)

print("Pennies:", pennies)

Exercise 4-4

a = 17

b = 23

print( "a =", a, "and b =", b )

a += b

b= a - b

a -= b

print( "a =", a, "and b =", b )

I learned how to use “//” in code to make it round to the nearest number so that I can use the remainder. I also learned how to swap two variables without needing to use a temporary third one. I need to work on making codes work together and creating longer codes without a lot of errors. I feel like I successfully completed the first two exercises but found the next two to be more difficult.