Debugging a python file

Chapter 5

COP 2047 02Z

Vikel Cunningham

Exercise 5-2

First I ran the program to ensure the program is running without syntax errors.

The file was able to run through the program.

I did notice that although the code worked, the values that were given back In the console were way out of the relative ranges I was looking for. I used very valid values so my returned values should have been expected & yet the number was abnormally large.

Now that I have determined it was a logical/ calculation error, I then search within the code to find the exact location of the error.

Using monthly investment of 100

2 interest rate.

5 years.

The value outputs: 6236054.2

That is not logical.

First I fixed the monthly rate where it is not put into a fraction after being split up 12 times representing the months.

The last issue I noticed was the range being set from 1 to the range instead of 0 where the index starts.

Exercise 5-1

When running program I noticed the program is able to execute fine as I input values & complete the entire program.

I did notice an abnormal “Average Score” so this instantly points to a logical error.

Moving straight to the average is where I will move my suspicion since that is mainly the only math occurring within this code.

Although my suspicions were lead through the average, I was wrong. It was not the average where the logical error took place. I did the math to see how the average was calculated Vs. the actual average & it seemed that it was splitting the numbers in half from the expected average value. I then noticed the counter was increasing 2 times each increment which is 1 too many. I commented out the 1st counter & I ran the code again & had a success!