This week I started with reading the text about objects and classes. After reading the text, I looked at the weekly assignment and I really started to understand the big difference between static and non-static methods and variables. With this new knowledge I started working on my first post for the week. As I was coming up with what I wanted my program to do, to show the relationship between objects and classes. I investigated how to have two classes in the same file to just save some time and space by being able to use one screenshot to show all the code. This took time and some trial and error because I discovered you couldn’t have two classes with the public keyword in the same file, and the file needed to be named after the class that was public.

After I finished my post, I created a copy of the previous week’s assignment since I was modifying the class for this week. I like to have a backup in case I ever need to go back or in case I need to start over. When I started working on the assignment, I really understood the difference between static and non-static variables and methods. Connecting the dots after the code was working, and I had the two types of variables together was when it really clicked. Realizing that the non-static variables are created when the object is created and related to one specific object, really helped me to understand why the counter variables are static, if they weren’t they would need to be in the main function and there would need to be logic for checking the answer was correct or not and incrementing the correct variable if they were. The MultipleChoiceQuestion class is nice because it’s entirely self-contained and you could use it with another driver class, by putting them in the same folder and creating the correct objects, which really showed the value of reusable classes in Java.

After the assignment I looked at some other programming exercises from the textbook, to make sure I really understood the concepts. This helped me to make sure I fully understood all the new concepts. This is important because I know that the way I learn best is by doing something hands-on. So being able to immerse myself in the content and do a few extra assignments so I have more experience working with the concepts is very important. I also found that getting errors and then investigating them has become a very important way that I learn as well. When I was creating the program for my weekly post, understanding that having two public classes in the same file is an error, and investigating the error helped me to better understand how Java handles things like classes.

References

Eck, D. J. (2019). *Introduction to programming using Java*, version 8.1. Hobart and William Smith Colleges. <http://math.hws.edu/javanotes/>.