Week 1 Research

What are the 8 primitive data types in Java? What makes each of them unique? What Values can they hold?

There are 8 types of Primitive data in Java they are: char, byte, Boolean, short, long, int, double, and float.

- Byte: As the name implies, is 1 byte of information and holds between -128 to 127.
- Short: It is 2 bytes and holds between -32,768 to 32,767.
- Long: It is 8 bytes and holds between -9,223,372,036,854,775,808 to 9,223,372,036,854,775,807
- Int: It is 4 bytes and holds between -2,147,483,648 to 2,147,483,647
- Char: It is 2 bytes and holds not numerical value but character value such as a single letter or special character (ex: @ ! *).
- Double: It is 8 bytes and holds numbers with up to 15 decimal digits.
- Float: It is 4 bytes and holds numbers with 6 to 7 decimal digits.
- Boolean: It is the smallest at 1 bit and holds only true or false.

https://www.w3schools.com/java/java_data_types.asp

What was your favorite thing you learned this week?

Before I took this course, I took a little pre-course work in 'R' and used RStudio to write 'R' programming and noticed how different it is from Java. 'R' was developed by statisticians for statisticians to make financial reporting and data analysis much more efficient. Java is an object-orientated programming language and is used universally by all websites. While both languages can solve arithmetic problems, 'R' is better at analyzing Big Data while Java is better running large-scale projects such as Twitter and Facebook. Also writing in both codes is also different. In 'R' writing the code is a little simpler, for example in 'R' if X=13 you would write X <-(13). In Java for X=13 you would have to write the type of data you are using example: int X = 13; Int stands for integer which is a very common data type used in Java. Java is more universal in usage and faster' however 'R' is better suited for in-dept statistical analysis and financial reporting. Both languages are great which is why it is important for data analysts to know both languages.

https://www.seasiainfotech.com/blog/java-vs-python-vs-r-language/