Haskell Mackowski

8/25/2022

Week 1 Research Assignment

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

The 8 primitive data types in Java are byte, short, int, long, float, double, char, and Boolean. Each data type can be used for specific reasons to help your program run more efficiently, do mathematical equations, they can be used to check whether a statement is true or false, and to hold a value of a character.

byte can hold a value ranging from -128 to 127 (inclusive).

Short can hold a value ranging from -32,768 to 32,767 (inclusive).

Int can hold a whole number value ranging from -2^{31 to} 2³¹-1.

long can hold a whole number value ranging from -2⁶³ to 2⁶³-1

float can values with decimal points up to 6 – 7 decimal digits

<u>double</u> can values with decimal points up to 15–16 decimal digits making it more precise.

Boolean has only two possible values, true or false.

Char is a single 16-bit Unicode character

-References -

https://docs.oracle.com/javase/tutorial/java/nutsandbolts/datatypes.html#:~:text=byte %3A%20The%20byte%20data%20type,value%20of%20127%20(inclusive).

 $\underline{https://javarevisited.blogspot.com/2016/05/difference-between-float-and-double-injava.html\#axzz7d1JqoszZ$

What is your favorite thing you learned this week?

My favorite thing that I have learned this week is how to use Git / Github. I have been programming on and off as a hobby for a few years, but never learned how to use Git. Now I know and understand who to use it, and why it can be important to use it, especially if you are working on the same project with other people. I look forward to getting more familiar with Git in the future, and plan on using it from now on.