1. **What is git? Why is it useful? What is the git workflow?**

GIT is a version control system. This is useful because it keeps record of any changes made to our code in our GIT Hub repository. This allows us to work asynchronously and roll back should our project have any errors. Meaning we a team of developers can download a bunch of code and work on it on their own machine. After they are done they call upload it and merge the code into one repository.

The GIT work full consists of the following

1. Pull changes so your workspace has the most current code
2. Make changes to your code
3. Stage the changes by
   1. git add .
4. Take a snapshot of the changes
   1. git commit -am “Useful notes about what you did”
5. Push the changes
   1. git push origin master
6. You then have to merge your branch into the master branch

**2. 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 int, double, float, long, short, byte, char and boolean. Each one is unique in the size, type and the range of data it can hold. For example, boolean can hold data that is 1 bit in size and its values are either true or false. While a char holds one character such as a middle initial of “M”.

The byte, short, int and long types are all super similar. They hold numbers with byte having the smallest range, short being the next biggest and increasing in size from there. Depending on your expected values you should try to use the smallest type to save on memory. Float and doubles are like int’s, but they allow you to have decimal spaces, with float being 7 decimal spaces and double being 16.

**3. What is your favorite thing you learned this week?**

A lot of this week has been a review for me. That said two things I learned was the System.out.println shortcut (sysout ctr+space). I love time saving shortcuts, so much. This is my favorite thing I learned, this week. A close 2nd was how to caste variables so you can add a double and int properly and then store it in either one.

**Citations**

Provided videos  
<https://www.youtube.com/watch?v=3a2x1iJFJWc>  
https://www.geeksforgeeks.org/difference-between-byte-short-int-and-long-datatype-in-java/