1. Which principal is used with access specifiers?

* Access specifiers(modifiers) induldge ion the practice of allowing variables/methods be accessible over different parts of your code. There are private, default(package) access, public, and protected access modifiers. A private class/variable is only specific to the class in which it resides. A default access modifier is accessible only within the package in which it resides. A protected access modifier is accessible in packages as well as sub-classes. And a public access modifier is accessible everywhere within the code.

1. The article for the API for the Object class is read and understood!
2. Unique features of specific Java versions:

* **Java 5**: Java 5 introduced several new concepts that are used today in Java. They introduced the enhanced for-loop, varargs, static import, autoboxing, anums, annotations, generics, an covariant return types.
* **Java 6**: Java 6 Introduced instrumentation
* Java 7: Java 7 introduced the switch statement, binary literals, the try-with-resources, underscores in numeric literals, and catching multiple exceptions through an individual catch-statement.
* **Java 8**: Java 8 is now the standard used in industries as it is the most stable release since Java 5. With Java 8, date/time API’s were introduced, lambda expressions, method references, functional interfaces, stream, base64 encode and decode, default methods, forEach methods, collectors, String joiners, Optional classes, Nashhorn JavaScript, Parallel Array Sorting, type inference, method parameter reflection, type annotations and repeating annotations, Java JDBC improvements, Java IO improvement, and Java concurrency improvement.
* **Java 12**: This is the most recent release with new features such as: switch expressions, default CDS archives, Shenandoah, Microbenchmark suite, JVM constants API, One AArch 64 port, abortable mixed collectinos for G1, and promptly returned unused committed memory from G1.

1. Read about System, out, and println

* System is the ‘final’ class that is used to initially pull this data from. Out is the static member field from the System class, and println is the name of the method from the PrintStream class.

1. Explain psvm:

* Public static void main(String[] args) {} is the main method for Java programming. All execution of the programming starts underneath the main method, wherever it may reside in the code. However code can still compile without a main method. Public references that is accessible in all parts of the code, static represents that it is a class method, void represents that this method will not return anything, and the argument is a String array with one argument named ‘args’. This allows for all of the command line arguments to take place. It is an array type of java.lang.String.

1. You were reminded to start the second day of class with Strings!
2. The **JDK** is the Java Development Kit and acts as the core component for the Java Environment. It provides all of the tools, executables, and binaries needed to compile, debug, process, and execute your Java program. The **JVM** acts as the ‘heart’ of the java programming language. Here is where our code is converted into byte code into machine specific code. The **JRE** is an implementation of the JVM where you are able to establish the environment/platform to execute Java code.
3. What is the difference between a path and a class path?

* A path simply allows for setting up the environment on an operating system. The class path is a java environment variable which is used by the Java compiler to find a path.

1. Is Java a pass by value, or pass by reference language?

* Java is pass by value

1. Why doesn’t Java use pointers?

* Java does not use pointers due to security purposes. Java uses references to hide the pointers.

1. Why is char 2 byes in Java?

* In Java char uses UTF-16. This translates into 16 bit which is equivalent to 2 bytes.