Week 02 - Objects

Topics covered in this week

- Initialization & Cleanup
- equals vs. hashcode (light version)
- Inner classes (incl. anonymous)
- Access control
- Reusing classes
- Interfaces & Abstract classes
- Interfaces in Java 8+ (default methods)
- Interfaces in Java 9+ (private methods)

Reading material

- https://docs.oracle.com/javase/tutorial/java/javaOO/classes.html
- https://docs.oracle.com/javase/tutorial/java/IandI/index.html
- https://www.journaldev.com/12850/java-9-private-methods-interfaces
- https://www.journaldev.com/21095/java-equals-hashcode
- https://www.javatpoint.com/Garbage-Collection

Homework

Difficulty	Problem	Notes
EASY	Create a class that holds the *firstname* and the *surname* of a person. Make it have two *constructors,* one with both *firstname* and *surname,* and one with *full name* (we assume each individual has only one *surname* and at least one *firstname* separated by spaces). Test in main class.	
EASY	Create a class called Tank that can be filled and emptied (let's say it has acts like a stack), and has a termination condition that it must be empty when the object is cleaned up. Write a finalize() that verifies this termination condition. In main(), test the possible scenarios that can occur when your Tank is used.	Add objects to the tank and then call the garbage collector.
EASY	Create a small application that demonstrates (with sysouts) the order in which *constructors*, *local variables*, *fields*, *static blocks* are initialized / called - consider using *superclasses* as well.	

Kahoot