Java Day 8

Garbage Collection

Remember that Java handles memory management

- Garbage Collection - is up to Java -> and it's when an object gets removed from memory
    - `finalize()`: method invoked by the JVM when it realizes an object should be garbage collected.
        - its main purpose is to release resources used by objects before they're removed from memory
    - `gc()` : the garbage collection method

NEVER use these!! The time at which garbage collector calls finalizers is dependent on the JVM's implementation and the system's condition, which are out of our control.

- They are costly.
- `gc()` does **not** trigger garbage collection - just a hint to the JVM to start GC.
- The JVM knows better when to do this.

Generics

- All Java Collections use "Generics" -> `<Type>`
- Generics act as a specifier (and limiter) for a type of data to be used within a class or interface.
- Generics can be used when writing classes, interfaces, and methods.
    - To use generics in a method, the containing class or interface must use generics / be generic
- Generic types must be an Object (primitives are not allowed -> Wrapper Classes)
- "I don't know what type this will be, but when this class is instantiated, a type will be provided"

```
List<String> stringList = new ArrayList<String>();
```