1. What are the differences between Lists, Sets, and Maps in Java?
   1. **Lists are like an array but the length does not have to be predefined** 
      1. **It is different from Sets in that it allows duplicates and it maintains the order in which items are entered.**
   2. **Sets are like Lists except that duplicates are not allowed. And order of entry is not maintained.**
   3. **Maps are key value pairs**
      1. **Values can be duplicates however the keys must be unique**

**I learned this from the videos for this week.**

1. List at least two different implementations for each collection (List, Set, and Map). When would you use one of the implementations over the other?
   1. **List**
      1. **ArrayList**
      2. **LinkedList**
      3. **Vector**
   2. **Set**
      1. **HashSet**
      2. **LinkedHashSet**
      3. **TreeSet**
   3. **Map**
      1. **HashMap**
      2. **LinkedHashMap**
      3. **TreeMap**
      4. **Hashtable**
2. Write a line of code that shows how you would instantiate an ArrayList of String.

**List<String> wrestlers = new ArrayList<String>();**

**URL = from the videos**

1. Write a line of code that shows how you would instantiate a HashSet of StringBuilder.
2. Write a line of code that shows how you would instantiate a HashMap of String, String.

**HashMap<String, String> stateCapitals = new HashMap<String, String>();**

**https://www.w3schools.com/java/java\_hashmap.asp**

6. What is your favorite thing you learned this week?

**I struggled during the week ¾ assignments because I needed to know the length of the Array ahead of time. I liked that I can now use a list.**