

Research

1. What are the differences between Lists, Sets, and Maps in Java?
 - a. Lists
 - i. Allows Duplicates in List
 - ii. Elements are ordered
 - iii. Accept null elements
 - b. Set
 - i. Do not allow duplicates
 - ii. Unordered collection
 - iii. Can only have one null element
 - c. Map
 - i. Can have duplicate value but not keys
 - ii. They have a key and value pair unlike other collections
 - iii. Hashtable doesn't allow null values but HashMap allows null values and one null key
2. Write a line of code that shows how you would instantiate an ArrayList of String.
 - a. `List<String> names = new ArrayList<String>();`
3. Write a line of code that shows how you would instantiate a HashSet of StringBuilders
 - a. `Set<String> names = new HashSet<String>();`
4. Write a line of code that shows how you would instantiate a HashMap of String, String.
 - a. `Map<String, String> dictionary = new HashMap<String, String>();`

Links for citing:

<https://www.java67.com/2013/01/difference-between-set-list-and-map-in-java.html#:~:text=List%20in%20Java%20provides%20ordered,key%2Dvalue%20pair%20and%20hashing.>

<https://docs.oracle.com/javase/tutorial/collections/implementations/list.html>