JAVA Collections

• A collection — sometimes called a container — is simply an object that groups multiple elements into a single unit. Collections are used to store, retrieve, manipulate, and communicate aggregate data. (https://docs.oracle.com/javase/tutorial/collections/intro/)

• Lists are groups of objects where there can be duplicates

• Set are groups where there are no duplicates

• Other collection types are queues, deques (double ended queue), and maps, SortedSet, SortedMap, TreeMaps

LIST: Functions much like a variable sized array. Each entry has an index and items can be added and taken away

SET: Things are there, or they aren’t. There is no duplication of items, no order or indexing. Good for a dictionary or to see if there is an entry in a list of items

MAP: Good for tracking association of keys and values

QUEUE: Like a list, but you are only concerned with the end; what goes in and out. Usually adding to one side and removing form the other, like a line or a sequential to-do list

Lists and Collections have built-in functions like add, remove, get, size, etc.