Lewis, Joseph

CSC 123

Maps

Maps are not the same as Arrays and ArrayLists. Maps can hold a key and a value. It is a good way of keeping values in pairs. Values can be the same in a map but the keys must be different. Maps can be used in different ways.

There are hashmaps. Hashmaps do not organize the map in a specific way. However, this map is the best as far as performance. Since the map is not being organized and need to improve performance, this can help. TreeMaps organize the map in alphabetical order. This is useful for organization. This is a sorted map. Another example of a sorted map is LinkedHashMap. This keeps the map in the order it was placed into the map.

The keys in a map can only be of one data type at a time. The keys can all be a string, integer, double, etc. This is the same for values. However, you can place an object inside of a map. This object can be another map. So you can have maps within maps. You can also place lists into a map such as an arraylist.

To place something into a map, you need to use .put to add it to the map. You can use the containskey or containsvalue to search for a key or value that is in a map. You can clear a map of all of the elements inside of the map. Remove can remove something from a map if a key is provided. Size can also be used to get the number of key and value pairs in a map. Putall can put all keys and values from one map into another map. You can print out anything from a map as long as you have the key for it. If you provide the key, the value will be printed out.CSC 123