

Intro Assignment: Fingerprint Groups

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In this program we are trying to solve a way to collect Fgroups and there corresponding names. Then print out the names organized by corresponding fingerprint groups. To do this task I will be using a HashMap that will store one String and a Vec<String>. The Fgroup which will be considered the key and the names are the values which will be stored into the Vector. The invariants for the code “are for every Fgroup read thus far, it exists as a key in the HashMap. For every Fgroup read there exists at least one name associated with it.”

Since Keys are unique within a HashMap if you try to store a duplicate key the key and value pair will be overwritten. To stop that from happening every time we insert a Fgroup and a name we will just allow the Fgroup to be overwritten but not the values associated with the pair. Once I have all the data stored correctly. It will allow me to loop through the HashMap, as I stated previously for every Fgroup there will be a name associated with the Fgroup. Since I stored all values for every Fgroup inside a Vector of Strings, I’ll be able to store multiple names for the same Fgroup. As I loop through HashMap I will loop through the vector of values and print out the vector of values based on the order of the keys within the HashMap.