I tested Dylan's code whose tests I wrote are in the *GroupmateDylanTest.java.* In the first test test1(), I passed two empty Hashmap as inputs *Hash_csv1, and Hash_csv3* to test Dylan's *compareHashMap* function. An empty *CSV* file created with its contents being similar to the test1_result file which is empty

When invalid path names such as *documents/differences.csv* are given, the function *testCorrectFileFormat.* The function *testCorrectFileFormat* will return False. When I pass in files with different extensions such as sample_file_3.xlsx, it will be an invalidfileformat. The same occurs when we pass in sample_file_3.pdf

The bug found in Dylan's code is that he uses a Hashmap to compare where there is probability of collision when the two different keys in Dylan code generate same hashcode() leading to inaccurate comparison of columns such as customer ID

I tested Jonah's code whose tests I wrote are in the *GroupJonahTest.java.* I wrote tests to test three different types of exceptions *FileNotFoundException, RuntimeException and Exception.*

Jonah only had one main[] string function to test the code which was troublesome to test. The bug in Jonah's code was that All the Exceptions: *FileNotFoundException, RuntimeException and Exception* were not handled well when I was testing his code