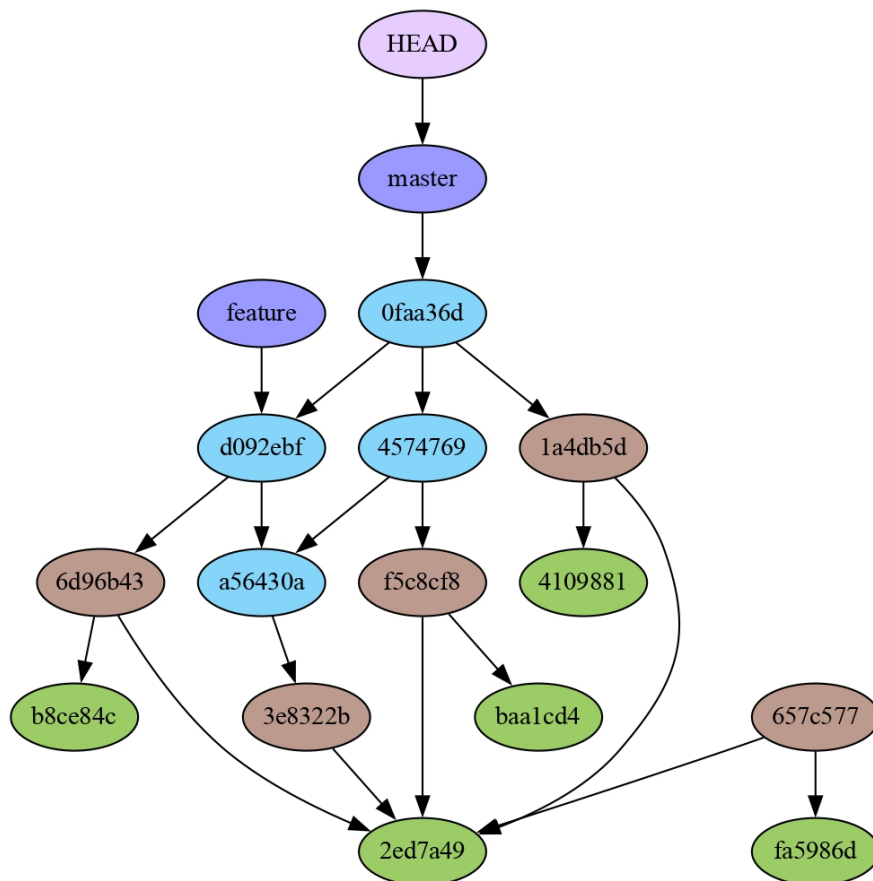


## Software Tools and Technologies Lab II Assignment 2

3. Demonstrate a case where the branch merging in git leads to a conflict. Show how we can visualize the conflict. Resolve the conflict and show that the subsequent attempt to merge succeeds.

Ans:

The conflict arises whenever we try to merge the file with the same name but have different content inside them. Whenever the conflict arises, the git lets us know that conflict has occurred and it needs to be resolved so that the merge can take place without any loss of data.



We can visualize the conflict with the help of git graph. When we try to merge two files with same name, we get a conflict. Then it tells us to resolve that conflict. As the content of files are different but their name are same, git saves both the content of the files in one file. We then modify it in our own way. This conflicted file is stored in the detached tree and blob of the git graph (present on the right bottom part of the git graph).

When we have resolved the conflict, we add and commit the file in the master branch and thus we get the latest commit which is formed by the merging of feature and master branch. Like this, the conflict is resolved and merge succeeds.