Software Tools and Technologies Lab II Assignment 1

9. The merge commit is a special commit object. Find out the contents that go into calculating the shasum of such a commit.

Ans:

The shasum of merge commit is calculated based on the contents which includes:

1.'The tree object' which shows the state of the repository when the merge command was initiated. It contains all the contents of the files and directories that were a part of the merge as well as any new files or directories that were created.

2. SHA-256 hash of each parent commit is contained in the merge commit object.

3. 'The Commit Message' which is also contained in the merge commit object.

These all objects are combined and hashed together to calculate the shasum for the merge commit. This hash uniquely identifies the merge commit and all of its contents, which includes the parent commits, the tree object, and the commit message.