

Git Contd

How git works

- Hashing algorithms:
 - Hashing algorithms generate a fixed length characters for any given input irrespective of their size
 - The output characters will be same only when the input is same.
 - We have many algorithms here
 - md5
 - sha1
 - sha256
 - sha512
- Git uses sha1 hashing algorithms
- Lets use two plumbing commands
 - `git cat-file -t <id>`
 - `git cat-file -p <id>`
- Lets understand terms
 - tree represents folder
 - object/blob represents file
- In git we have two types of reference objects
 - branch
 - this object always points to latest commit on a branch
 - tag
 - this object points to fixed commit
- In Git HEAD should always point to a reference object, if not git shows the warning on detached HEAD i.e. HEAD is looking directly to a commit.

