**Assignment 1**

→ List out the key difference between a centralized version control system and distributed version control system

CVS will have a centralized repository and maintains revision history and versioning. If Central server crashes then recovery will be difficult, Also Collaborators should be always connected to the CVS to perform operations

Whereas, In DVS each developer gets his/her own private repository and they maintains the revision history and versioning in their local. Recovery is simple, Collaborators need to connect the Master repository only when they syncing the changes.

→ List down any two centralized version control system and 2 distributed version control system

CVS - SVN and Perforce

DVS – Git and Mercurial

→ What are the advantages of git VCS over other VCS

Less dependency on remote repository  
Everyone will have their own local repository  
Branching and tagging is easy

→ What are the different states of a file in the Git VCS

Modified, Staged, Committed and Untracked