# **Day 1:**

**Topic: Git**

Points Covered: -

* Git installing
* Git config: -
  + git config –list –show-origin (to see all git config).
  + git config –global user.email “email address” (to set email address for all repository created in future).
  + git config –global user.name “your name” (to set author name for all repository created in future).
  + git config user.name “email address” (to set email address for current repository).
  + git config user.name “you name” (to set author name for current repository).
  + git config –global init.defaultBranch <Branch Name> (to set default branch name for all repository which will be created in future).
* Initializing Repository: -
  + git init (to initialize local git repo).
* Staging file: -
  + git add <file name>
  + git add –all or git add -A
* Commit file: -
  + git commit -m <commit message>
  + git commit -a -m <commit message> (to commit files without staging).
* Checking repo status: -
  + git status
  + git status –short
* Checking commit history: -
  + git log
  + git log –oneline
* Branching in git: -
  + git branch (to see branches in local repo).
  + git branch -a (to see branches in both local and remote repo).
  + git branch -r (to see only remote repo).
  + git branch <branch name> (to create a new branch).
  + git branch -d <branch name> (to delete branch).
  + git checkout <branch name> (to switch the HEAD on branch).
  + git checkout -b <branch name> (to create new branch and switch on it).
  + git merge <branch name> (to merge two branches).
* Remote Repository: -
  + git remote add origin <repo url> (add remote repo).
  + git remote set-url origin git@<repo url> (replace remote repo).
  + git push –set-upstream origin <branch\_name> (to upload data from local repo to remote repo).
  + git push origin <branch\_name> (to push branch on remote repo).
  + git fetch origin (to fetch changes from remote repo to local).
  + git diff <branch\_name> (to see diffrences between local repo and remote repo).
  + git merge <remote\_branch\_name> (to merge changes which were fetched, used after fetching changes).
  + git pull origin (to fetch and merge changes from remote repo. Also, equivalent to git fetch and git merge).
* Git undo: -
  + git revert HEAD (to revert the last changes).
  + git revert HEAD –no-edit (to revert the last changes to skip the commit message editor).
  + git reset <commit\_hash> (to reset repo at the previous commit).
  + git commit –amend -m <commit\_message> (to undo latest commit).
* Git ignore:-
  + .gitignore: - A file to keep required file out from the scope of git.