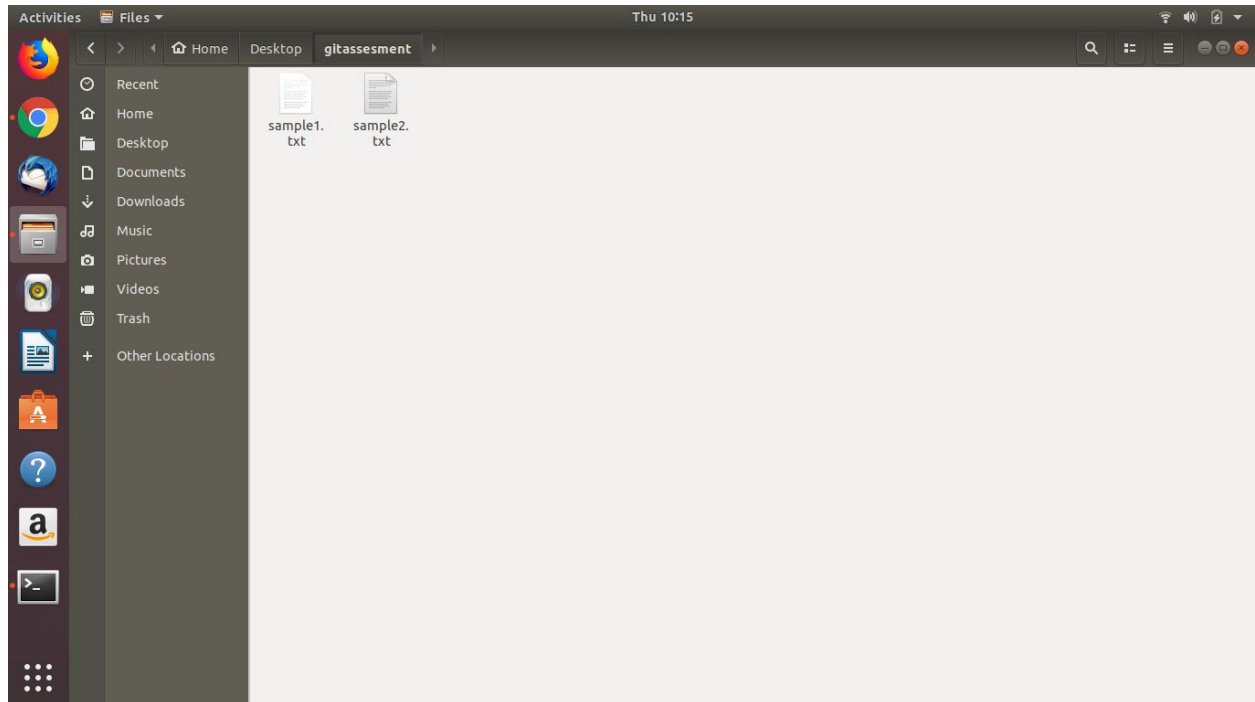


GIT Assessment

Distributed version control system(DVCS)

- 1) Create a Distributed version control system, and put files into it.



```
Activities Terminal Thu 10:17
akash@Quantiphi-746: ~/Desktop/gitassessment

File Edit View Search Terminal Help
akash@Quantiphi-746:~$ cd Desktop/
akash@Quantiphi-746:~/Desktop$ mkdir gitassessment
akash@Quantiphi-746:~/Desktop$ cd gitassessment/
akash@Quantiphi-746:~/Desktop/gitassessment$ nano sample1.txt
akash@Quantiphi-746:~/Desktop/gitassessment$ nano sample2.txt
akash@Quantiphi-746:~/Desktop/gitassessment$ nano sample2.txt
akash@Quantiphi-746:~/Desktop/gitassessment$ ls
sample1.txt sample2.txt
akash@Quantiphi-746:~/Desktop/gitassessment$ git init
Initialized empty Git repository in /home/akash/Desktop/gitassessment/.git/
akash@Quantiphi-746:~/Desktop/gitassessment$ git config user.name "Akash Mahale"
akash@Quantiphi-746:~/Desktop/gitassessment$ git config user.email "npmahale15@gmail.com"
akash@Quantiphi-746:~/Desktop/gitassessment$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)

        sample1.txt
        sample2.txt

nothing added to commit but untracked files present (use "git add" to track)
akash@Quantiphi-746:~/Desktop/gitassessment$
```

```
Activities Terminal Thu 10:17
akash@Quantiphi-746: ~/Desktop/gitassessment

File Edit View Search Terminal Help
akash@Quantiphi-746:~/Desktop/gitassessment$ nano sample1.txt
akash@Quantiphi-746:~/Desktop/gitassessment$ nano sample2.txt
akash@Quantiphi-746:~/Desktop/gitassessment$ nano sample2.txt
akash@Quantiphi-746:~/Desktop/gitassessment$ ls
sample1.txt sample2.txt
akash@Quantiphi-746:~/Desktop/gitassessment$ git init
Initialized empty Git repository in /home/akash/Desktop/gitassessment/.git/
akash@Quantiphi-746:~/Desktop/gitassessment$ git config user.name "Akash Mahale"
akash@Quantiphi-746:~/Desktop/gitassessment$ git config user.email "npmahale15@gmail.com"
akash@Quantiphi-746:~/Desktop/gitassessment$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)

        sample1.txt
        sample2.txt

nothing added to commit but untracked files present (use "git add" to track)
akash@Quantiphi-746:~/Desktop/gitassessment$ git add sample1.txt
akash@Quantiphi-746:~/Desktop/gitassessment$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)

        Terminal file: sample1.txt

Untracked files:
  (use "git add <file>..." to include in what will be committed)

        sample2.txt

akash@Quantiphi-746:~/Desktop/gitassessment$
```

```
Activities Terminal Thu 10:18
akash@Quantiphi-746: ~/Desktop/gitassessment

File Edit View Search Terminal Help

nothing added to commit but untracked files present (use "git add" to track)
akash@Quantiphi-746:~/Desktop/gitassessment$ git add sample1.txt
akash@Quantiphi-746:~/Desktop/gitassessment$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)

        new file:   sample1.txt

Untracked files:
  (use "git add <file>..." to include in what will be committed)

        sample2.txt

akash@Quantiphi-746:~/Desktop/gitassessment$ nano sample3.html
akash@Quantiphi-746:~/Desktop/gitassessment$ ls
sample1.txt sample2.txt sample3.html
akash@Quantiphi-746:~/Desktop/gitassessment$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)

        new file:   sample1.txt

Untracked files:
  (use "git add <file>..." to include in what will be committed)

        sample2.txt
        sample3.html

akash@Quantiphi-746:~/Desktop/gitassessment$
```

```
Activities Terminal Thu 10:18
akash@Quantiphi-746: ~/Desktop/gitassessment

File Edit View Search Terminal Help

Untracked files:
  (use "git add <file>..." to include in what will be committed)

        sample2.txt

akash@Quantiphi-746:~/Desktop/gitassessment$ nano sample3.html
akash@Quantiphi-746:~/Desktop/gitassessment$ ls
sample1.txt sample2.txt sample3.html
akash@Quantiphi-746:~/Desktop/gitassessment$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)

        new file:   sample1.txt

Untracked files:
  (use "git add <file>..." to include in what will be committed)

        sample2.txt
        sample3.html

akash@Quantiphi-746:~/Desktop/gitassessment$ git add .
akash@Quantiphi-746:~/Desktop/gitassessment$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)

        new file:   sample1.txt
        new file:   sample2.txt
        new file:   sample3.html

akash@Quantiphi-746:~/Desktop/gitassessment$
```

- 2) Replicate a DVCS on your local machine, make changes to its files, and then put them back into it.

```
Activities Terminal Thu 10:20
akash@Quantiphi-746: ~/Desktop/gitassesment

sample2.txt
sample3.html

akash@Quantiphi-746:~/Desktop/gitassesment$ git add .
akash@Quantiphi-746:~/Desktop/gitassesment$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)

        new file:   sample1.txt
        new file:   sample2.txt
        new file:   sample3.html

akash@Quantiphi-746:~/Desktop/gitassesment$ nano sample1.txt
akash@Quantiphi-746:~/Desktop/gitassesment$ nano sample2.txt
akash@Quantiphi-746:~/Desktop/gitassesment$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)

        new file:   sample1.txt
        new file:   sample2.txt
        new file:   sample3.html

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

        modified:   sample2.txt

akash@Quantiphi-746:~/Desktop/gitassesment$
```

```
Activities Terminal Thu 10:20
akash@Quantiphi-746: ~/Desktop/gitassesment

new file:   sample1.txt
new file:   sample2.txt
new file:   sample3.html

akash@Quantiphi-746:~/Desktop/gitassesment$ nano sample1.txt
akash@Quantiphi-746:~/Desktop/gitassesment$ nano sample2.txt
akash@Quantiphi-746:~/Desktop/gitassesment$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)

        new file:   sample1.txt
        new file:   sample2.txt
        new file:   sample3.html

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

        modified:   sample2.txt

akash@Quantiphi-746:~/Desktop/gitassesment$ git add sample2.txt
akash@Quantiphi-746:~/Desktop/gitassesment$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)

        new file:   sample1.txt
        new file:   sample2.txt
        new file:   sample3.html

akash@Quantiphi-746:~/Desktop/gitassesment$
```

```
Activities  Terminal  Thu 10:21
akash@Quantiphi-746: ~/Desktop/gitassesment

File Edit View Search Terminal Help
modified: sample2.txt

akash@Quantiphi-746:~/Desktop/gitassesment$ git add sample2.txt
akash@Quantiphi-746:~/Desktop/gitassesment$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)

        new file:   sample1.txt
        new file:   sample2.txt
        new file:   sample3.html

akash@Quantiphi-746:~/Desktop/gitassesment$ git commit -m "First commit -3 files added"
[master (root-commit) ece2b90] First commit -3 files added
 3 files changed, 7 insertions(+)
 create mode 100644 sample1.txt
 create mode 100644 sample2.txt
 create mode 100644 sample3.html
akash@Quantiphi-746:~/Desktop/gitassesment$ git status
On branch master
nothing to commit, working tree clean
akash@Quantiphi-746:~/Desktop/gitassesment$ git add remote origin https://github.com/qann237/gitassesment.git
fatal: pathspec 'remote' did not match any files
akash@Quantiphi-746:~/Desktop/gitassesment$ git remote add origin https://github.com/qann237/gitassesment.git
akash@Quantiphi-746:~/Desktop/gitassesment$ git push origin master
Username for 'https://github.com': qann237
Password for 'https://qann237@github.com':
Counting objects: 5, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (3/3), done.
Writing objects: 100% (5/5), 412 bytes | 412.00 KiB/s, done.
Total 5 (delta 0), reused 0 (delta 0)
To https://github.com/qann237/gitassesment.git
 * [new branch]      master -> master
akash@Quantiphi-746:~/Desktop/gitassesment$
```

3) List down all the files which have changed in the last commit. List only the file names.

```
Activities Terminal Thu 10:38
akash@Quantiphi-746: ~/Desktop/gitassesment

File Edit View Search Terminal Help
akash@Quantiphi-746:~/Desktop/gitassesment$ git log --name-status --oneline
da45897 (HEAD -> master, origin/master) commit6
851cbe4 commit5
M .gitignore
026cdd3 Delete sample4.json
D sample4.json
338562e Third commit after changing .gitignore
M .gitignore
74c7fc0 Delete .gitignore
D .gitignore
46b0e3b Second commit
A .gitignore
A sample4.json
ece2b90 First commit -3 files added
A sample1.txt
A sample2.txt
A sample3.html
akash@Quantiphi-746:~/Desktop/gitassesment$ git show --name-only
commit da4589722f8dea05a10a46596adf6ab97cecb0b8 (HEAD -> master, origin/master)
Merge: 851cbe4 026cdd3
Author: Akash Mahale <npmahale15@gmail.com>
Date: Thu Jun 6 10:35:20 2019 +0530

    commit6

akash@Quantiphi-746:~/Desktop/gitassesment$
```

```
Activities Terminal Thu 10:44
akash@Quantiphi-746: ~/Desktop/env2

File Edit View Search Terminal Help
commit7
sample7.txt
akash@Quantiphi-746:~/Desktop/gitassesment$ git revert ff46154abc677cb2dcebf1ef31705692910b8230
[master 1a52bac] Revert "commit7"
1 file changed, 2 deletions(-)
delete mode 100644 sample7.txt
akash@Quantiphi-746:~/Desktop/gitassesment$ git log --name-status --oneline
1a52bac (HEAD -> master) Revert "commit7"
D sample7.txt
ff46154 (origin/master) commit7
A sample7.txt
da45897 commit6
851cbe4 commit5
M .gitignore
026cdd3 Delete sample4.json
D sample4.json
338562e Third commit after changing .gitignore
M .gitignore
74c7fc0 Delete .gitignore
D .gitignore
46b0e3b Second commit
A .gitignore
A sample4.json
ece2b90 First commit -3 files added
A sample1.txt
A sample2.txt
A sample3.html
akash@Quantiphi-746:~/Desktop/gitassesment$ ls
sample1.txt sample2.txt sample3.html sample6.txt
akash@Quantiphi-746:~/Desktop/gitassesment$ cd
akash@Quantiphi-746:~/Desktop$ cd Desktop/
akash@Quantiphi-746:~/Desktop$ mkdir env2
akash@Quantiphi-746:~/Desktop$ cd env
bash: cd: env: No such file or directory
akash@Quantiphi-746:~/Desktop$ cd env2/
akash@Quantiphi-746:~/Desktop/env2$ ls
akash@Quantiphi-746:~/Desktop/env2$ git pull
```


- 4) You've accidentally added some files on a DVCS. Remove those files from the DVCS without deleting them from your local system.

```
akash@Quantiphi-746: ~/Desktop/gitassessment
Changes to be committed:
  (use "git rm --cached <file>..." to unstage)

        new file:   sample1.txt
        new file:   sample2.txt
        new file:   sample3.html

akash@Quantiphi-746:~/Desktop/gitassessment$ git commit -m "First commit -3 files added"
[master (root-commit) ece2b90] First commit -3 files added
 3 files changed, 7 insertions(+)
 create mode 100644 sample1.txt
 create mode 100644 sample2.txt
 create mode 100644 sample3.html
akash@Quantiphi-746:~/Desktop/gitassessment$ git status
On branch master
nothing to commit, working tree clean
akash@Quantiphi-746:~/Desktop/gitassessment$ git add remote origin https://github.com/qann237/gitassessment.git
fatal: pathspec 'remote' did not match any files
akash@Quantiphi-746:~/Desktop/gitassessment$ git remote add origin https://github.com/qann237/gitassessment.git
akash@Quantiphi-746:~/Desktop/gitassessment$ git push origin master
Username for 'https://github.com': qann237
Password for 'https://qann237@github.com':
Counting objects: 5, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (3/3), done.
Writing objects: 100% (5/5), 412 bytes | 412.00 KiB/s, done.
Total 5 (delta 0), reused 0 (delta 0)
To https://github.com/qann237/gitassessment.git
 * [new branch]      master -> master
akash@Quantiphi-746:~/Desktop/gitassessment$ nano sample4.json
akash@Quantiphi-746:~/Desktop/gitassessment$ mkdir d1
akash@Quantiphi-746:~/Desktop/gitassessment$ cd d1
akash@Quantiphi-746:~/Desktop/gitassessment/d1$ nano sample5.txt
akash@Quantiphi-746:~/Desktop/gitassessment/d1$ cd ..
akash@Quantiphi-746:~/Desktop/gitassessment$ ls
d1 sample1.txt sample2.txt sample3.html sample4.json
akash@Quantiphi-746:~/Desktop/gitassessment$
```

```
GNU nano 2.9.3 .gitignore
sample4.txt
/d1[]

Wrote 2 lines.
Get Help  Write Out  Where Is  Cut Text  Justify  Cur Pos  Undo  Mark Text  To Bracket
Exit      Read File  Replace  Uncut Text  To Spell  Go To Line  Redo  Copy Text  WhereIs Next
```

```
Activities Terminal Thu 10:25
akash@Quantiphi-746: ~/Desktop/gitassesment

File Edit View Search Terminal Help
akash@Quantiphi-746:~/Desktop/gitassesment$ nano sample4.json
akash@Quantiphi-746:~/Desktop/gitassesment$ mkdir d1
akash@Quantiphi-746:~/Desktop/gitassesment$ cd d1
akash@Quantiphi-746:~/Desktop/gitassesment/d1$ nano sample5.txt
akash@Quantiphi-746:~/Desktop/gitassesment/d1$ cd ..
akash@Quantiphi-746:~/Desktop/gitassesment$ ls
d1 sample1.txt sample2.txt sample3.html sample4.json
akash@Quantiphi-746:~/Desktop/gitassesment$ nano .gitignore
akash@Quantiphi-746:~/Desktop/gitassesment$ git add.
git: 'add.' is not a git command. See 'git --help'.

The most similar command is
add
akash@Quantiphi-746:~/Desktop/gitassesment$ git add .
akash@Quantiphi-746:~/Desktop/gitassesment$ git status
On branch master
Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

    new file:   .gitignore
    new file:   sample4.json

akash@Quantiphi-746:~/Desktop/gitassesment$ git commit -m "Second commit"
[master 46b0e3b] Second commit
 2 files changed, 5 insertions(+)
 create mode 100644 .gitignore
 create mode 100644 sample4.json
akash@Quantiphi-746:~/Desktop/gitassesment$ git push origin master
Username for 'https://github.com': qann237
Password for 'https://qann237@github.com':
Counting objects: 4, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 444 bytes | 444.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0)
To https://github.com/qann237/gitassesment.git
   ece2b90..46b0e3b master -> master
akash@Quantiphi-746:~/Desktop/gitassesment$
```



```
Activities Terminal Thu 10:26
akash@Quantiphi-746: ~/Desktop/gitassessment
File Edit View Search Terminal Help
GNU nano 2.9.3 .gitignore
sample4.json
/d1

Wrote 2 lines
Get Help Write Out Where Is Cut Text Justify Cur Pos Undo Mark Text To Bracket
Exit Read File Replace Uncut Text To Spell Go To Line Redo Copy Text WhereIs Next
```

```
Activities Terminal Thu 10:26
akash@Quantiphi-746: ~/Desktop/gitassessment
File Edit View Search Terminal Help
The most similar command is
add
akash@Quantiphi-746:~/Desktop/gitassessment$ git add .
akash@Quantiphi-746:~/Desktop/gitassessment$ git status
On branch master
Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

    new file:   .gitignore
    new file:   sample4.json

akash@Quantiphi-746:~/Desktop/gitassessment$ git commit -m "Second commit"
[master 46b0e3b] Second commit
 2 files changed, 5 insertions(+)
 create mode 100644 .gitignore
 create mode 100644 sample4.json
akash@Quantiphi-746:~/Desktop/gitassessment$ git push origin master
Username for 'https://github.com': qann237
Password for 'https://qann237@github.com':
Counting objects: 4, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 444 bytes | 444.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0)
To https://github.com/qann237/gitassessment.git
   ece2b90..46b0e3b master -> master
akash@Quantiphi-746:~/Desktop/gitassessment$ nano .gitignore
akash@Quantiphi-746:~/Desktop/gitassessment$ git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

    modified:   .gitignore

no changes added to commit (use "git add" and/or "git commit -a")
akash@Quantiphi-746:~/Desktop/gitassessment$
```

```
Activities Terminal Thu 11:40
akash@Quantiphi-746: ~/Desktop/gitassessment

File Edit View Search Terminal Help
Password for 'https://qann237@github.com':
Counting objects: 3, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 292 bytes | 292.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/qann237/gitassessment.git
   0a71e32..dc528b7  master -> master
akash@Quantiphi-746:~/Desktop/gitassessment$ git rm --cached sample
sample1.txt sample2.txt sample8.txt
akash@Quantiphi-746:~/Desktop/gitassessment$ git rm --cached sample8.txt
rm 'sample8.txt'
akash@Quantiphi-746:~/Desktop/gitassessment$ ls
sample1.txt sample2.txt sample6.txt sample8.txt
akash@Quantiphi-746:~/Desktop/gitassessment$ git commit "removedsample8"
error: pathspec 'removedsample8' did not match any file(s) known to git.
akash@Quantiphi-746:~/Desktop/gitassessment$ git commit -m "removedsample8"
[master 5eb4100] removedsample8
 1 file changed, 2 deletions(-)
 delete mode 100644 sample8.txt
akash@Quantiphi-746:~/Desktop/gitassessment$ git push origin master
Username for 'https://github.com': qann237
Password for 'https://qann237@github.com':
remote: Invalid username or password.
fatal: Authentication failed for 'https://github.com/qann237/gitassessment.git/'
akash@Quantiphi-746:~/Desktop/gitassessment$ git push origin master
Username for 'https://github.com': qann237
Password for 'https://qann237@github.com':
Counting objects: 2, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 225 bytes | 225.00 KiB/s, done.
Total 2 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/qann237/gitassessment.git
   dc528b7..5eb4100  master -> master
akash@Quantiphi-746:~/Desktop/gitassessment$
```

- 5) You've accidentally committed some files on a DVCS. Revert the DVCS to a previous stable state.

```
Activities Terminal Thu 10:44
akash@Quantiphi-746: ~/Desktop/env2

File Edit View Search Terminal Help
commit7
sample7.txt
akash@Quantiphi-746:~/Desktop/gitassessment$ git revert ff46154abc677cb2dcebf1ef31705692910b8230
[master 1a52bac] Revert "commit7"
 1 file changed, 2 deletions(-)
 delete mode 100644 sample7.txt
akash@Quantiphi-746:~/Desktop/gitassessment$ git log --name-status --oneline
1a52bac (HEAD -> master) Revert "commit7"
D sample7.txt
ff46154 (origin/master) commit7
A sample7.txt
da45897 commit6
851cbe4 commit5
M .gitignore
026cdd3 Delete sample4.json
D sample4.json
338562e Third commit after changing .gitignore
M .gitignore
74c7fc0 Delete .gitignore
D .gitignore
46b0e3b Second commit
A .gitignore
A sample4.json
ece2b90 First commit -3 files added
A sample1.txt
A sample2.txt
A sample3.html
akash@Quantiphi-746:~/Desktop/gitassessment$ ls
sample1.txt sample2.txt sample3.html sample6.txt
akash@Quantiphi-746:~/Desktop/gitassessment$ cd
akash@Quantiphi-746:~/Desktop$ cd Desktop/
akash@Quantiphi-746:~/Desktop$ mkdir env2
akash@Quantiphi-746:~/Desktop$ cd env
bash: cd: env: No such file or directory
akash@Quantiphi-746:~/Desktop$ cd env2/
akash@Quantiphi-746:~/Desktop/env2$ ls
akash@Quantiphi-746:~/Desktop/env2$ git pull
```

- 6) Create a DVCS capable of supporting 2 similar dev environments. Make changes in the files which are present on both of them and then merge the environments into one.

```
akash@Quantiphi-746: ~/Desktop/env2
git mergetool --tool=meld -y --no-prompt sample1.txt
Merging:
sample1.txt

Normal merge conflict for 'sample1.txt':
{local}: modified file
{remote}: modified file
The merge tool meld is not available as 'meld'
akash@Quantiphi-746:~/Desktop/env2$ git mergetool --tool=araxis -y --no-prompt sample1.txt
Merging:
sample1.txt

Normal merge conflict for 'sample1.txt':
{local}: modified file
{remote}: modified file
sample1.txt seems unchanged.
Was the merge successful [y/n]? n
merge of sample1.txt failed
Continue merging other unresolved paths [y/n]? y
akash@Quantiphi-746:~/Desktop/env2$ git rebase --continue
sample1.txt: needs merge
You must edit all merge conflicts and then
mark them as resolved using git add
akash@Quantiphi-746:~/Desktop/env2$ git mergetool --tool=araxis -y --no-prompt sample1.txt
Merging:
sample1.txt

Normal merge conflict for 'sample1.txt':
{local}: modified file
{remote}: modified file
sample1.txt seems unchanged.
Was the merge successful [y/n]? y
akash@Quantiphi-746:~/Desktop/env2$ git mergetool --tool=araxis -y --no-prompt sample1.txt
No files need merging
akash@Quantiphi-746:~/Desktop/env2$ git rebase --continue
Applying: commit9changeby env2
akash@Quantiphi-746:~/Desktop/env2$
```

```
akash@Quantiphi-746: ~/Desktop/env2
{local}: modified file
{remote}: modified file
sample1.txt seems unchanged.
Was the merge successful [y/n]? n
merge of sample1.txt failed
Continue merging other unresolved paths [y/n]? y
akash@Quantiphi-746:~/Desktop/env2$ git rebase --continue
sample1.txt: needs merge
You must edit all merge conflicts and then
mark them as resolved using git add
akash@Quantiphi-746:~/Desktop/env2$ git mergetool --tool=araxis -y --no-prompt sample1.txt
Merging:
sample1.txt

Normal merge conflict for 'sample1.txt':
{local}: modified file
{remote}: modified file
sample1.txt seems unchanged.
Was the merge successful [y/n]? y
akash@Quantiphi-746:~/Desktop/env2$ git mergetool --tool=araxis -y --no-prompt sample1.txt
No files need merging
akash@Quantiphi-746:~/Desktop/env2$ git rebase --continue
Applying: commit9changeby env2
akash@Quantiphi-746:~/Desktop/env2$ ls
sample1_BACKUP_5850.txt  sample1_BACKUP_7630.txt  sample1_BASE_7504.txt  sample1_LOCAL_7191.txt  sample1_REMOTE_6525.txt
sample1_BACKUP_5930.txt  sample1_BACKUP_7697.txt  sample1_BASE_7568.txt  sample1_LOCAL_7398.txt  sample1_REMOTE_6628.txt
sample1_BACKUP_6010.txt  sample1_BASE_5850.txt   sample1_BASE_7630.txt  sample1_LOCAL_7504.txt  sample1_REMOTE_7191.txt
sample1_BACKUP_6092.txt  sample1_BASE_5930.txt   sample1_BASE_7697.txt  sample1_LOCAL_7568.txt  sample1_REMOTE_7398.txt
sample1_BACKUP_6214.txt  sample1_BASE_6010.txt   sample1_LOCAL_5850.txt  sample1_LOCAL_7630.txt  sample1_REMOTE_7504.txt
sample1_BACKUP_6295.txt  sample1_BASE_6092.txt   sample1_LOCAL_5930.txt  sample1_LOCAL_7697.txt  sample1_REMOTE_7568.txt
sample1_BACKUP_6375.txt  sample1_BASE_6214.txt   sample1_LOCAL_6010.txt  sample1_REMOTE_5850.txt  sample1_REMOTE_7630.txt
sample1_BACKUP_6525.txt  sample1_BASE_6295.txt   sample1_LOCAL_6092.txt  sample1_REMOTE_5930.txt  sample1_REMOTE_7697.txt
sample1_BACKUP_6628.txt  sample1_BASE_6375.txt   sample1_LOCAL_6214.txt  sample1_REMOTE_6010.txt  sample1.txt
sample1_BACKUP_7191.txt  sample1_BASE_6525.txt   sample1_LOCAL_6295.txt  sample1_REMOTE_6092.txt  sample1.txt.orig
sample1_BACKUP_7398.txt  sample1_BASE_6628.txt   sample1_LOCAL_6375.txt  sample1_REMOTE_6214.txt  sample2.txt
sample1_BACKUP_7504.txt  sample1_BASE_7191.txt   sample1_LOCAL_6525.txt  sample1_REMOTE_6295.txt  sample3.html
sample1_BACKUP_7568.txt  sample1_BASE_7398.txt   sample1_LOCAL_6628.txt  sample1_REMOTE_6375.txt
```

- 7) You have a DVCS supporting your prod, test and dev environments, you need to make sure that only a particular set of commits from the test environment are added in the prod environment. What & how would you do it?

I have assumed master branch as the prod env and have created a test1 and dev1(branches) env as testing and development environment. A file is being added from the test1 environment , committed. We change it to the master branch and cherry-pick the commit on the from test1 environment. It gets committed to the master branch and thus highlighted on the production environment. Similarly it is done using dev1 env. The hash of the commit is required for cherry-pick. Multiple changes and the corresponding changes were done for to the file in test1 and dev1 branches, however, the commit we were interested was selected from the git log and its hash was noted and the git cherry-pick <hash> was done and the desired changed file was highlighted on the prod env.


```
Activities Terminal Thu 13:15
akash@Quantiphi-746: ~/Desktop/gitassesment

--signed[=<yes|no|if-asked>]
                        GPG sign the push
--atomic                request atomic transaction on remote side
-o, --push-option <server-specific>
                        option to transmit
-4, --ipv4              use IPv4 addresses only
-6, --ipv6              use IPv6 addresses only

akash@Quantiphi-746:~/Desktop/gitassesment$ git push https://github.com/qann237/gitassesment.git
Username for 'https://github.com': qann237
Password for 'https://qann237@github.com':
\Counting objects: 3, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 284 bytes | 284.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/qann237/gitassesment.git
   f5b21c6..9076a13  dev1 -> dev1

akash@Quantiphi-746:~/Desktop/gitassesment$ git checkout master
Switched to branch 'master'

akash@Quantiphi-746:~/Desktop/gitassesment$ git cherry-pick 9076a13e4485e93b42086ad49763d590d8fe5ae1
[master 488a49c] additionsample14from dev1
Date: Thu Jun 6 13:07:09 2019 +0530
1 file changed, 2 insertions(+)
create mode 100644 sample14.txt

akash@Quantiphi-746:~/Desktop/gitassesment$ git push origin master
Username for 'https://github.com': qann237
Password for 'https://qann237@github.com':
Counting objects: 3, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 290 bytes | 290.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/qann237/gitassesment.git
   c564553..488a49c  master -> master
akash@Quantiphi-746:~/Desktop/gitassesment$
```

```
Activities Terminal Thu 13:19
akash@Quantiphi-746: ~/Desktop/gitassesment

Date: Thu Jun 6 12:38:30 2019 +0530

sample12added

commit 5a92e276310f288e1a6065fcd33b3a52182ec80 (testenv)
Author: Akash Mahale <npmahale15@gmail.com>
Date: Thu Jun 6 12:18:29 2019 +0530

sample10fromtestenv

commit ed650209147e84341fc2f1f12c28f272ad09bf52
Merge: dc2b2e2 9fa52a7
Author: Akash Mahale <npmahale15@gmail.com>
Date: Thu Jun 6 12:06:27 2019 +0530

Merge branch 'prodenv'

[8]+ Stopped git log
akash@Quantiphi-746:~/Desktop/gitassesment$ git checkout master
Switched to branch 'master'

akash@Quantiphi-746:~/Desktop/gitassesment$ git cherry-pick dd5c5f40cefbdd8e9b18d8d64f5d00de51c9a2a4
[master 2627610] sample15addedfromtest1
Date: Thu Jun 6 13:16:16 2019 +0530
1 file changed, 2 insertions(+)
create mode 100644 sample15.txt

akash@Quantiphi-746:~/Desktop/gitassesment$ git push origin master
Username for 'https://github.com': qann237
Password for 'https://qann237@github.com':
Counting objects: 3, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 290 bytes | 290.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/qann237/gitassesment.git
   488a49c..2627610  master -> master
akash@Quantiphi-746:~/Desktop/gitassesment$
```

```
Activities  Terminal  Thu 13:19
akash@Quantiphi-746: ~/Desktop/gitassesment

File Edit View Search Terminal Help
Total 3 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/qann237/gitassesment.git
  611f3d..dd5c5f4  test1 -> test1
akash@Quantiphi-746:~/Desktop/gitassesment$ nano sample15.txt
akash@Quantiphi-746:~/Desktop/gitassesment$ git add sample15.txt
akash@Quantiphi-746:~/Desktop/gitassesment$ git commit -m "somechnages in sample15 from test1"
[test1 973fea7] somechnages in sample15 from test1
 1 file changed, 1 insertion(+), 1 deletion(-)
akash@Quantiphi-746:~/Desktop/gitassesment$ git push https://github.com/qann237/gitassesment.git
Username for 'https://github.com': qann7
Password for 'https://qann7@github.com':
remote: Invalid username or password.
fatal: Authentication failed for 'https://github.com/qann237/gitassesment.git/'
akash@Quantiphi-746:~/Desktop/gitassesment$ git push https://github.com/qann237/gitassesment.git
Username for 'https://github.com': qann237
Password for 'https://qann237@github.com':
Counting objects: 3, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 303 bytes | 303.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/qann237/gitassesment.git
  dd5c5f4..973fea7  test1 -> test1
akash@Quantiphi-746:~/Desktop/gitassesment$ git log
commit 973fea7507178e82522fc64192a9304c7030acea (HEAD -> test1)
Author: Akash Mahale <npmahale15@gmail.com>
Date: Thu Jun 6 13:17:31 2019 +0530

    somechnages in sample15 from test1

commit dd5c5f40cefbd8e9b18d8d64f5d00de51c9a2a4
Author: Akash Mahale <npmahale15@gmail.com>
Date: Thu Jun 6 13:16:16 2019 +0530

    sample15addedfromtest1
```

