- **To create a Distributed version control system, and put the files into it.**

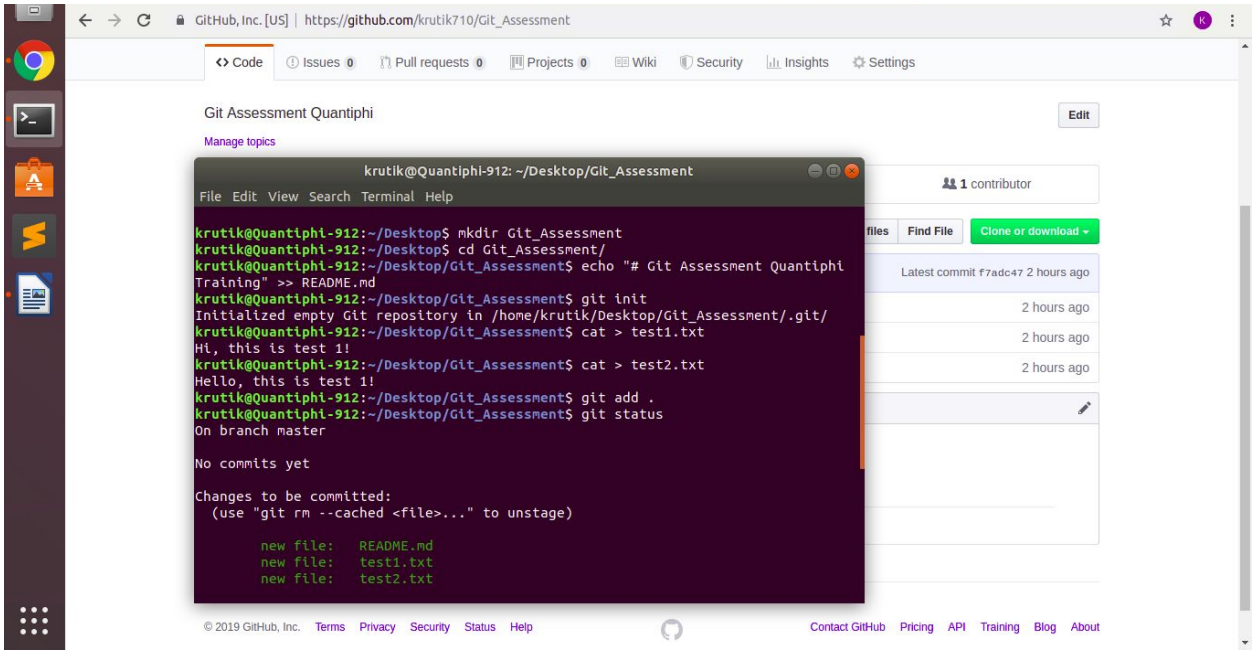
 # Creating Folder
mkdir Git_Assessment
cd Git_Assessment/

 # Initializing Readme and some test files
echo "# Git Assessment Quantiphi Training" >> README.md
git init
cat > test1.txt
Hi, this is test 1!
cat > test2.txt
Hello, this is test 1!

 # Adding, checking status and committing with commit message
git add .
git status
git commit -m "added readme, test1, test2"

 # Adding the origin of the repo to the local machine
git remote add origin https://github.com/krutik710/Git_Assessment.git

 # Pushing files to the master branch of repo
git push -u origin master


GitHub, Inc. [US] | https://github.com/krutik710/Git_Assessment
Code
Issues 0
Pull requests 0
Projects 0
Wiki
Security
Insights
Settings
Git Assessment Quantiphi
Edit
Manage topics
1 contributor
Find File
Clone or download
Latest commit f7adc47 2 hours ago
2 hours ago
2 hours ago
2 hours ago
krutik@Quantiphi-912: ~/Desktop/Git_Assessment
File Edit View Search Terminal Help
krutik@Quantiphi-912:~/Desktop$ mkdir Git_Assessment
krutik@Quantiphi-912:~/Desktop$ cd Git_Assessment/
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ echo "# Git Assessment Quantiphi Training" >> README.md
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ git init
Initialized empty Git repository in /home/krutik/Desktop/Git_Assessment/.git/
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ cat > test1.txt
Hi, this is test 1!
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ cat > test2.txt
Hello, this is test 1!
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ git add .
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ git status
On branch master
No commits yet
Changes to be committed:
(use "git rm --cached <file>..." to unstage)
new file: README.md
new file: test1.txt
new file: test2.txt
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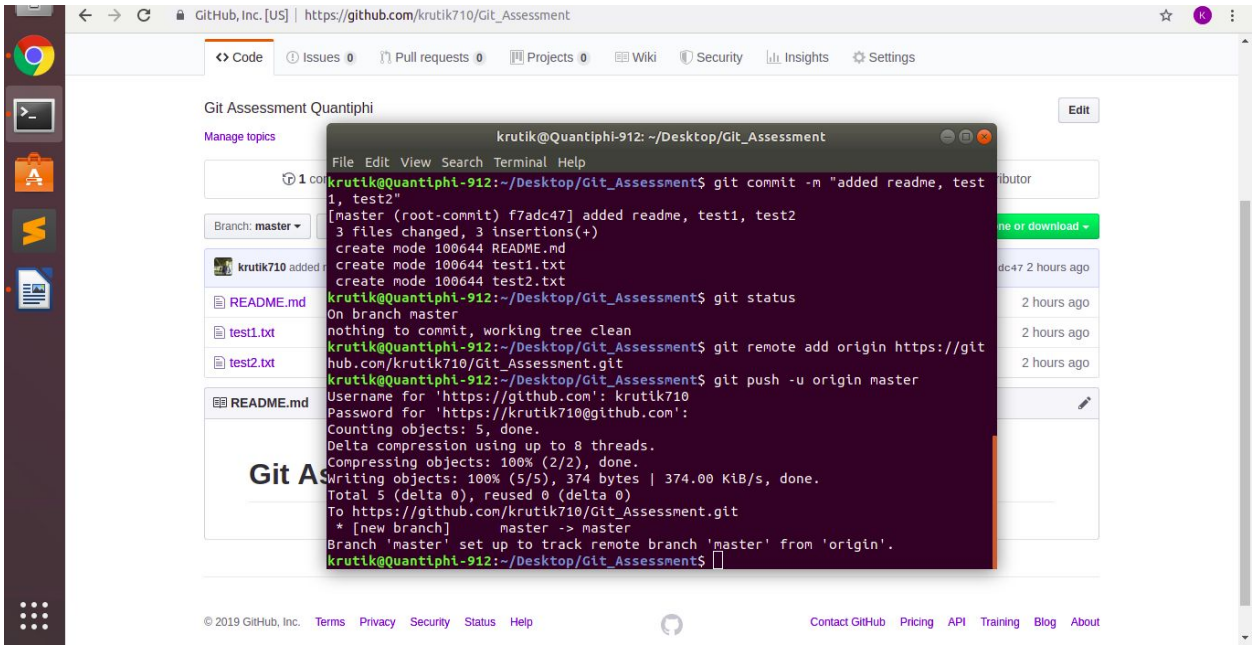
GitHub, Inc. [US] | https://github.com/krutik710/Git_Assessment
Code
Issues 0
Pull requests 0
Projects 0
Wiki
Security
Insights
Settings
Git Assessment Quantiphi
Edit
Manage topics
Branch: master
README.md
test1.txt
test2.txt
README.md
2 hours ago
krutik@Quantiphi-912: ~/Desktop/Git_Assessment
File Edit View Search Terminal Help
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ git commit -m "added readme, test1, test2"
[master (root-commit) f7adc47] added readme, test1, test2
3 files changed, 3 insertions(+)
create mode 100644 README.md
create mode 100644 test1.txt
create mode 100644 test2.txt
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ git status
On branch master
nothing to commit, working tree clean
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ git remote add origin https://github.com/krutik710/Git_Assessment.git
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ git push -u origin master
Username for 'https://github.com': krutik710
Password for 'https://krutik710@github.com':
Counting objects: 5, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (5/5), 374 bytes | 374.00 KiB/s, done.
Total 5 (delta 0), reused 0 (delta 0)
To https://github.com/krutik710/Git_Assessment.git
* [new branch] master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.
krutik@Quantiphi-912:~/Desktop/Git_Assessment$
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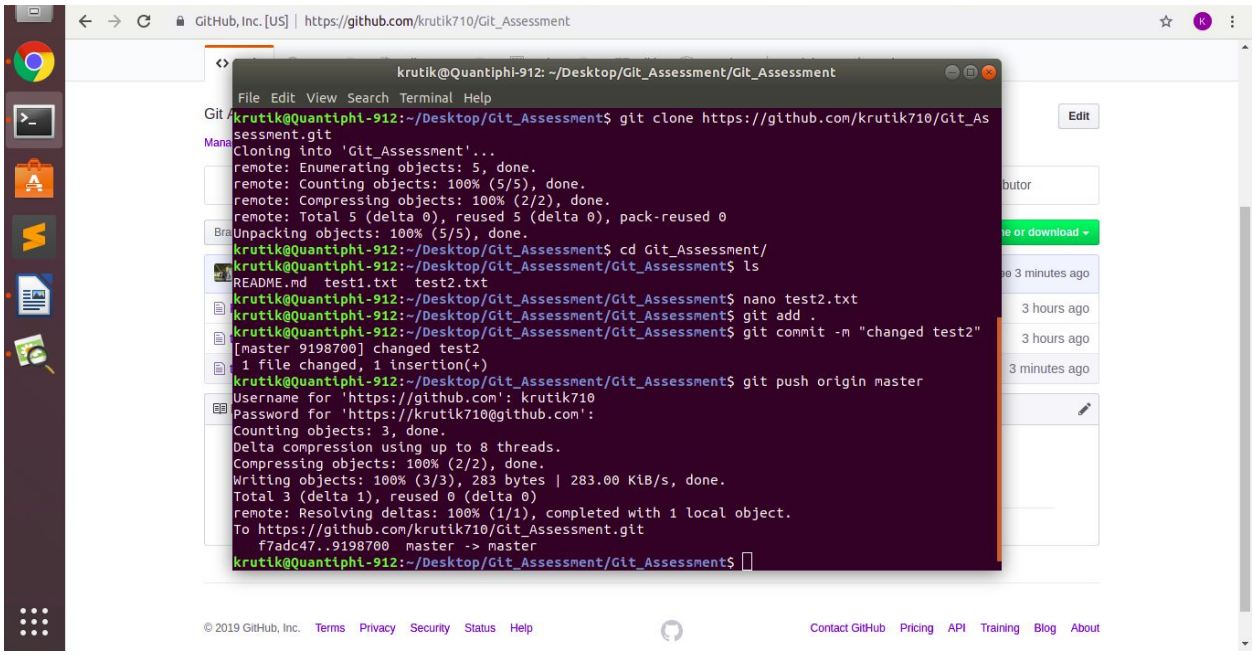
- **Replicate a DVCS on your local machine, make changes to its files, and then put them back into it.**

 # To replicate the repo
git clone https://github.com/krutik710/Git_Assessment.git

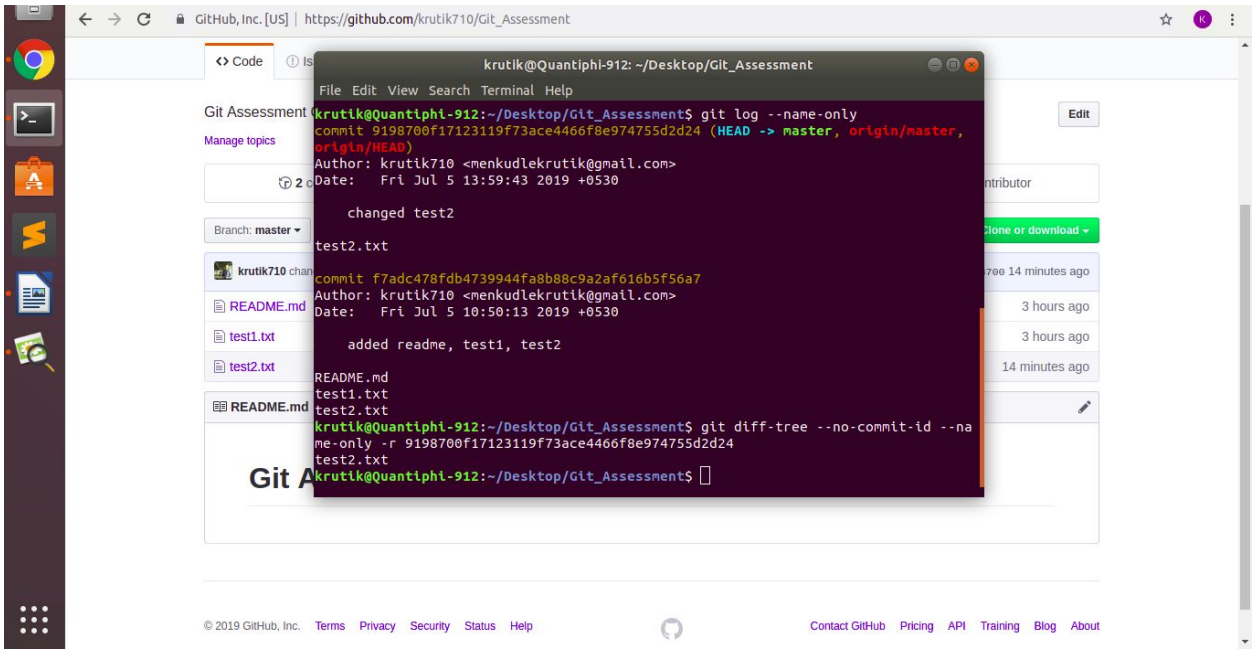
 # Change files, add, commit and push
nano test2.txt
git add test2.txt
git commit -m “changed test2”
git push origin master



- **List down all the files which have changed in the last commit. List only the file names.**

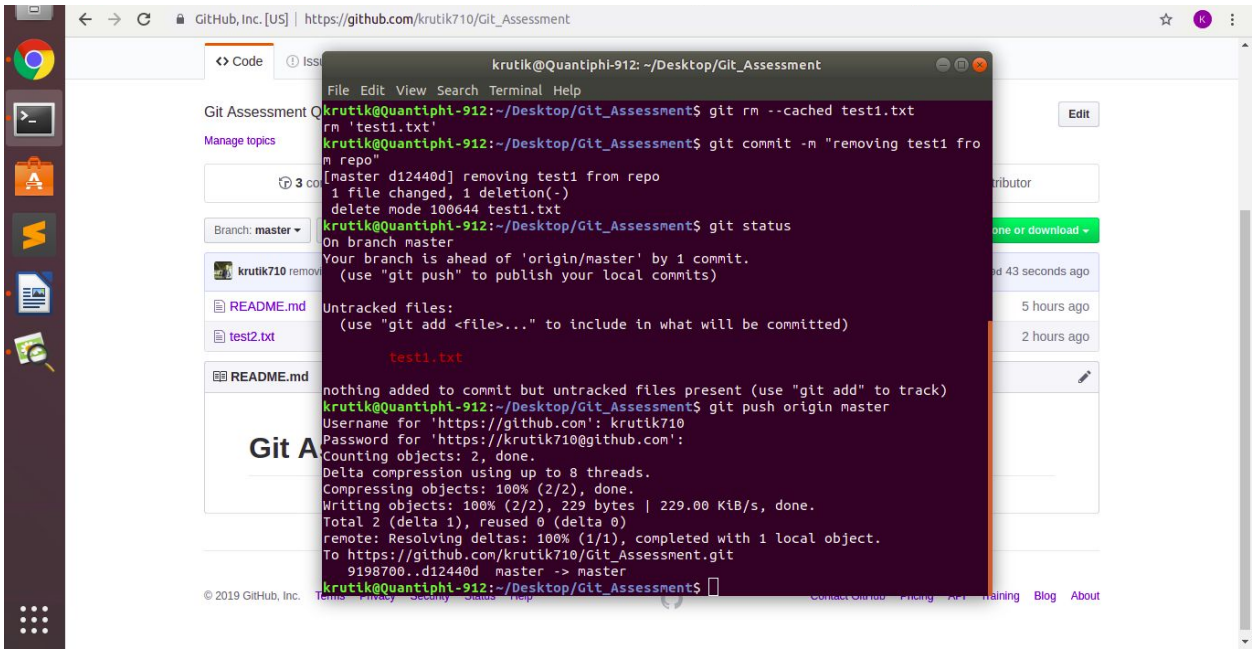
 # Getting names of all logs of the commit in repo
git log --name-only

 # Retrieving only the latest files changed
git diff-tree --no-commit-id --name-only -r 9198700f17123119f73ace4466f8e974755d2d24



- **Remove some files from the DVCS without deleting them from your local system.**

 # Removing file only from git repo
git rm --cached test1.txt
git commit -m "removing test1 from repo"
git push origin master



- **Reverting DVCS to a previous stable state**

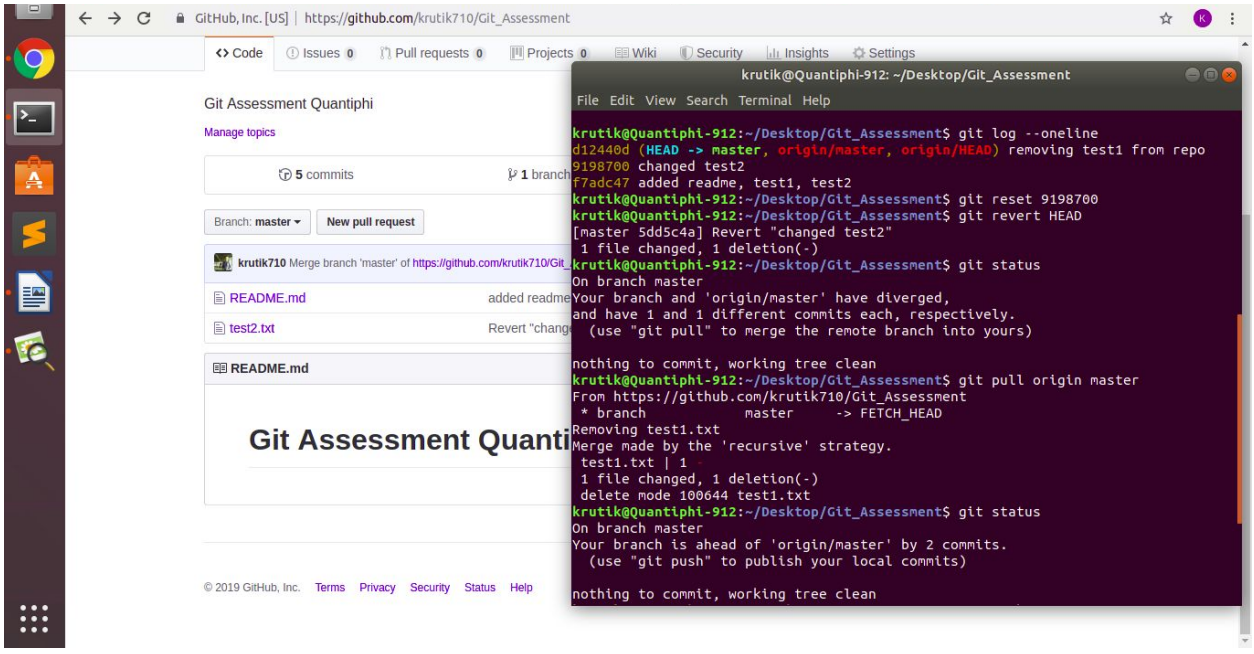
 # Reverting to the previous state (second commit, changing content in test2.txt)
 # Getting log of previous commit with simplified format
git log --oneline

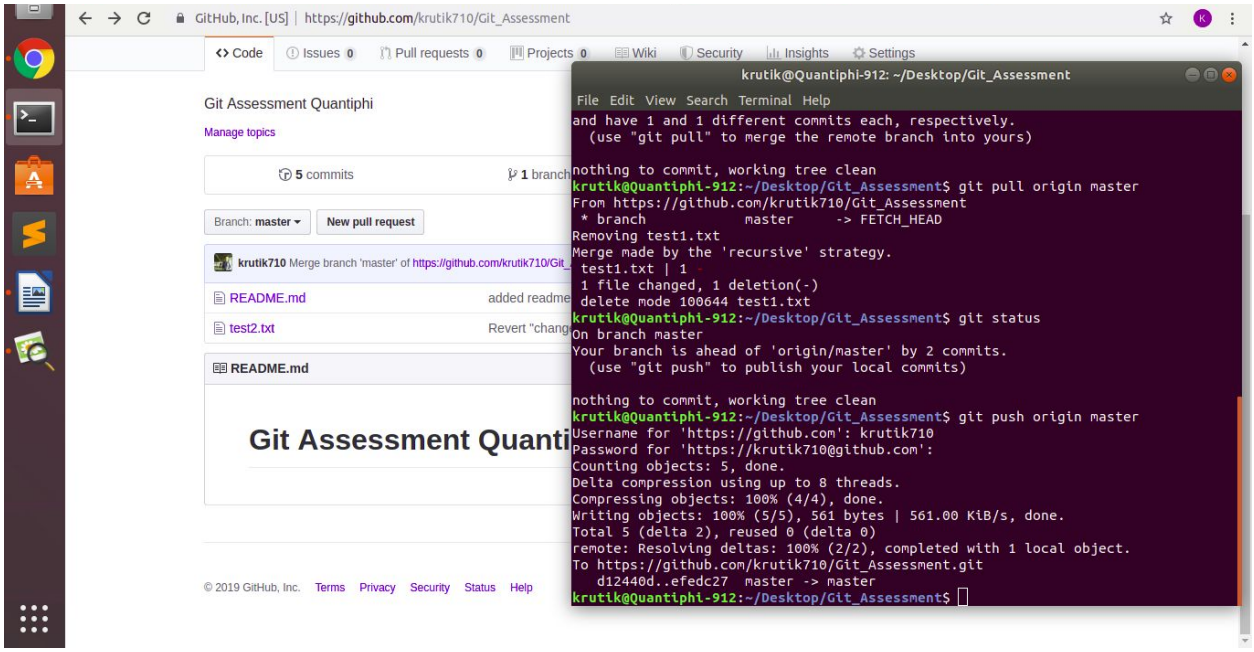
 # Reset to previous state using commit key
git reset 9198700

 # Reverting Head to that commit
git revert HEAD

 # Pulling previous commit to working
git pull origin master

 # Pushing the updated reverted to master
git push origin master




GitHub, Inc. [US] | https://github.com/krutik710/Git_Assessment
Code
Issues 0
Pull requests 0
Projects 0
Wiki
Security
Insights
Settings
Git Assessment Quantiphi
Manage topics
5 commits
1 branch
Branch: master
New pull request
krutik710 Merge branch 'master' of https://github.com/krutik710/Git_
README.md
added readme
test2.txt
Revert "chang
README.md
Git Assessment Quanti
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Terms
Privacy
Security
Status
Help
krutik@Quantiphi-912: ~/Desktop/Git_Assessment
File Edit View Search Terminal Help
and have 1 and 1 different commits each, respectively.
(use "git pull" to merge the remote branch into yours)
nothing to commit, working tree clean
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ git pull origin master
From https://github.com/krutik710/Git_Assessment
* branch master -> FETCH_HEAD
Removing test1.txt
Merge made by the 'recursive' strategy.
test1.txt | 1
1 file changed, 1 deletion(-)
delete mode 100644 test1.txt
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ git status
On branch master
Your branch is ahead of 'origin/master' by 2 commits.
(use "git push" to publish your local commits)
nothing to commit, working tree clean
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ git push origin master
Username for 'https://github.com': krutik710
Password for 'https://krutik710@github.com':
Counting objects: 5, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (4/4), done.
Writing objects: 100% (5/5), 561 bytes | 561.00 KiB/s, done.
Total 5 (delta 2), reused 0 (delta 0)
remote: Resolving deltas: 100% (2/2), completed with 1 local object.
To https://github.com/krutik710/Git_Assessment.git
d12440d..efedc27 master -> master
krutik@Quantiphi-912:~/Desktop/Git_Assessment$

- ## Make two branches, change files present in both and merge both branches

 # Make and checkout to another branch
git checkout -b test_branch

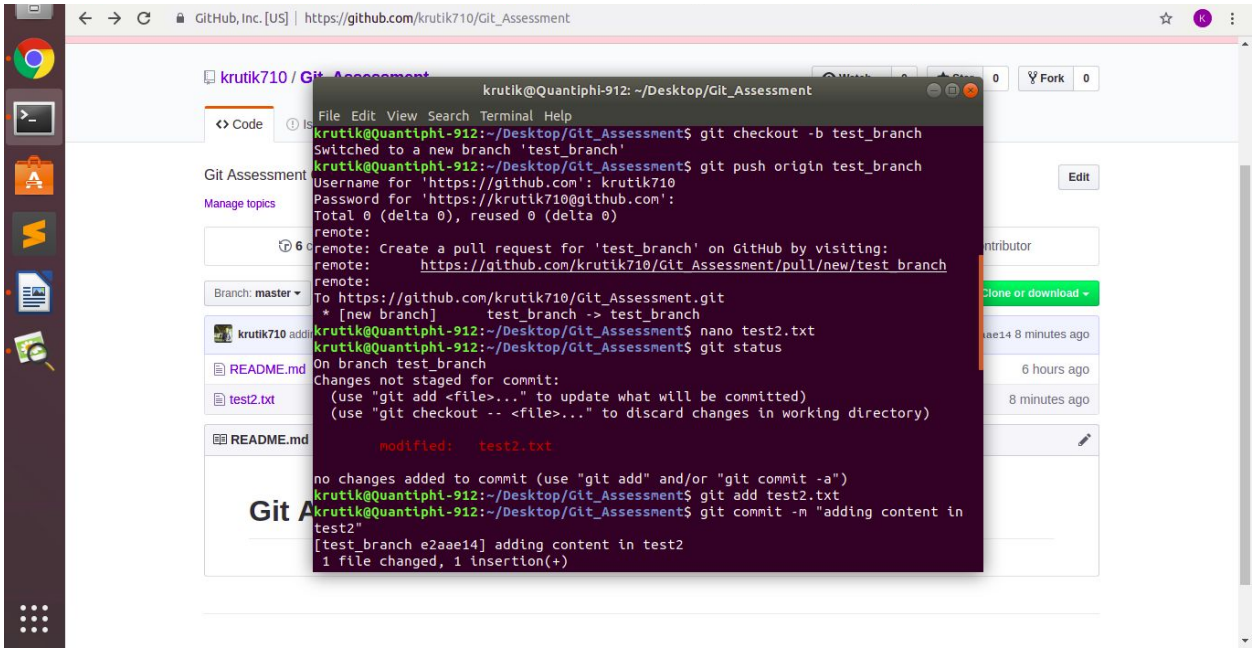
 # Pushing existing codebase to new branch
git push origin test_branch

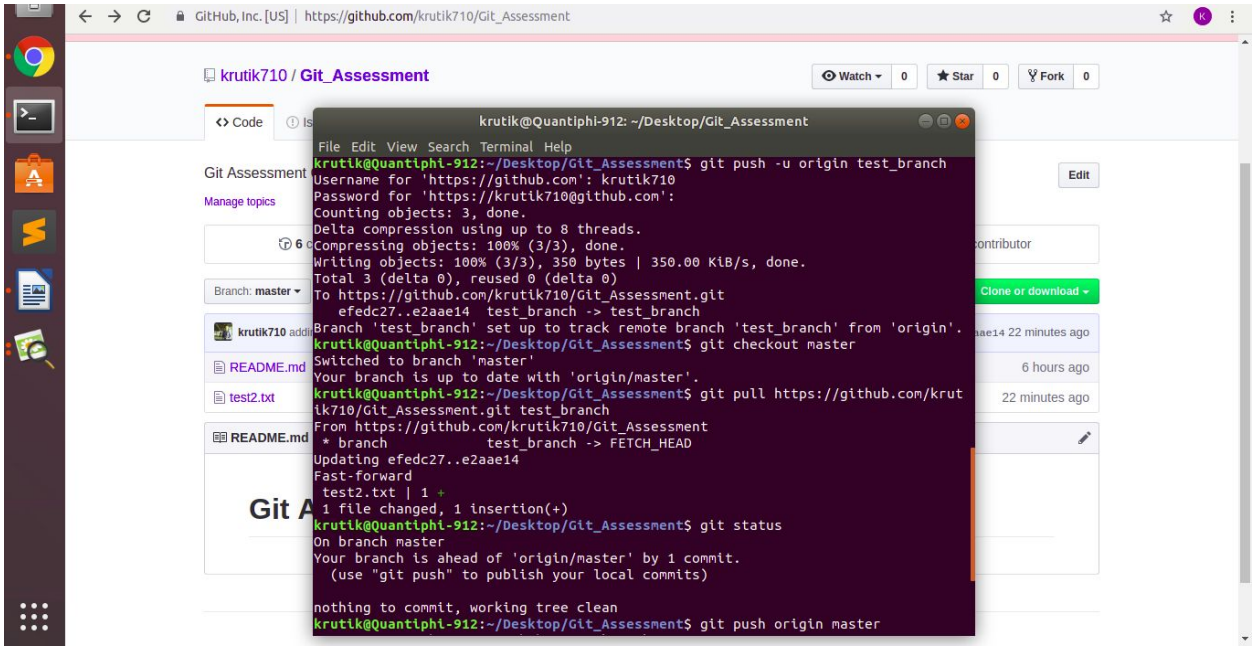
 # Making changes and add, commit, push to new branch
nano test2.txt
git add test2.txt
git commit -m "adding content in test2"
git push -u origin test_branch

 # Check Out to master branch
git checkout master

 # Merge both branches
git pull https://github.com/krutik710/Git_Assessment.git test_branch

 # Push the commit to master branch
git push origin master


GitHub, Inc. [US] | https://github.com/krutik710/Git_Assessment
krutik710 / Git_Assessment
Fork 0
Code
Git Assessment
Manage topics
Edit
Branch: master
Clone or download
README.md
6 hours ago
test2.txt
8 minutes ago
README.md
Git A
krutik@Quantiphi-912: ~/Desktop/Git_Assessment
File Edit View Search Terminal Help
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ git checkout -b test_branch
Switched to a new branch 'test_branch'
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ git push origin test_branch
Username for 'https://github.com': krutik710
Password for 'https://krutik710@github.com':
Total 0 (delta 0), reused 0 (delta 0)
remote:
remote: Create a pull request for 'test_branch' on GitHub by visiting:
remote: https://github.com/krutik710/Git_Assessment/pull/new/test_branch
remote:
To https://github.com/krutik710/Git_Assessment.git
* [new branch] test_branch -> test_branch
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ nano test2.txt
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ git status
On branch test_branch
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: test2.txt
no changes added to commit (use "git add" and/or "git commit -a")
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ git add test2.txt
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ git commit -m "adding content in test2"
[test_branch e2aae14] adding content in test2
1 file changed, 1 insertion(+)


GitHub, Inc. [US] | https://github.com/krutik710/Git_Assessment
krutik710 / Git_Assessment
Watch 0
Star 0
Fork 0
Code
Git Assessment
Manage topics
Edit
Branch: master
Clone or download
README.md
6 hours ago
test2.txt
22 minutes ago
README.md
Git A
krutik@Quantiphi-912: ~/Desktop/Git_Assessment
File Edit View Search Terminal Help
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ git push -u origin test_branch
Username for 'https://github.com': krutik710
Password for 'https://krutik710@github.com':
Counting objects: 3, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 350 bytes | 350.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To https://github.com/krutik710/Git_Assessment.git
efedc27..e2aae14 test_branch -> test_branch
Branch 'test_branch' set up to track remote branch 'test_branch' from 'origin'.
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ git pull https://github.com/krutik710/Git_Assessment.git test_branch
From https://github.com/krutik710/Git_Assessment
* branch test_branch -> FETCH_HEAD
Updating efedc27..e2aae14
Fast-forward
test2.txt | 1 +
1 file changed, 1 insertion(+)
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ git status
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
(use "git push" to publish your local commits)
nothing to commit, working tree clean
krutik@Quantiphi-912:~/Desktop/Git_Assessment$ git push origin master

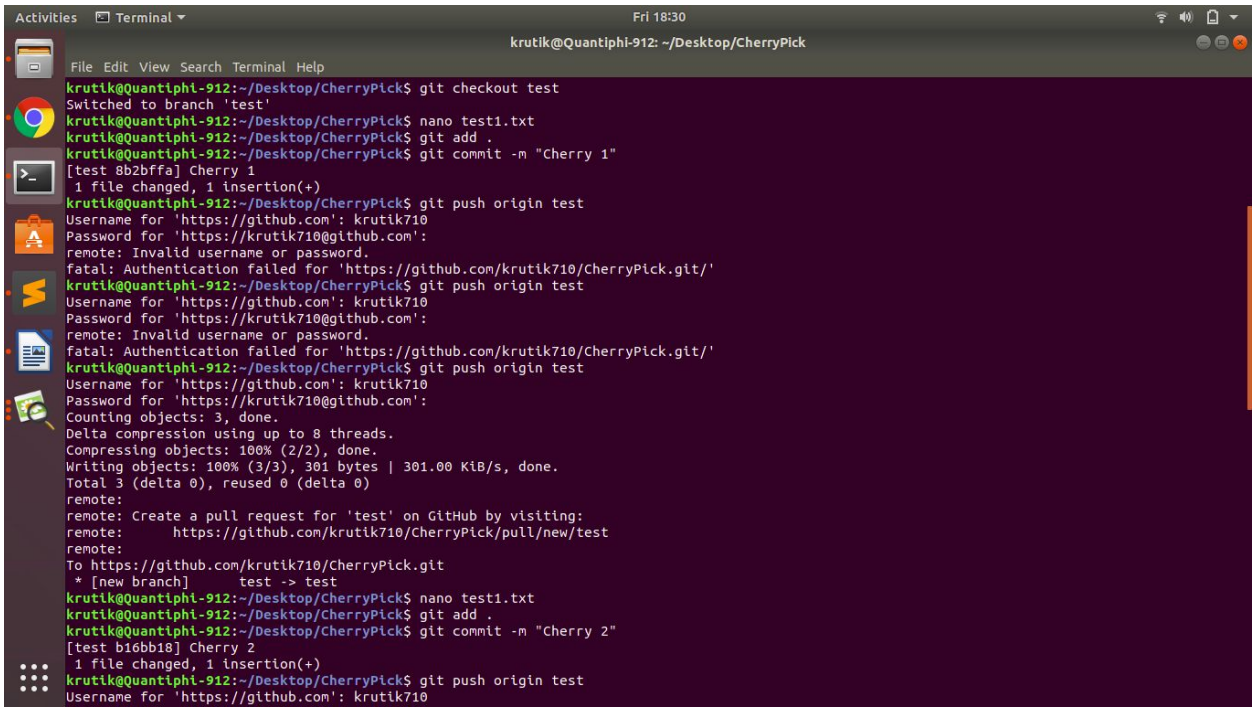
- **Make sure that only a particular set of commits from the test environment are added in the prod environment.**

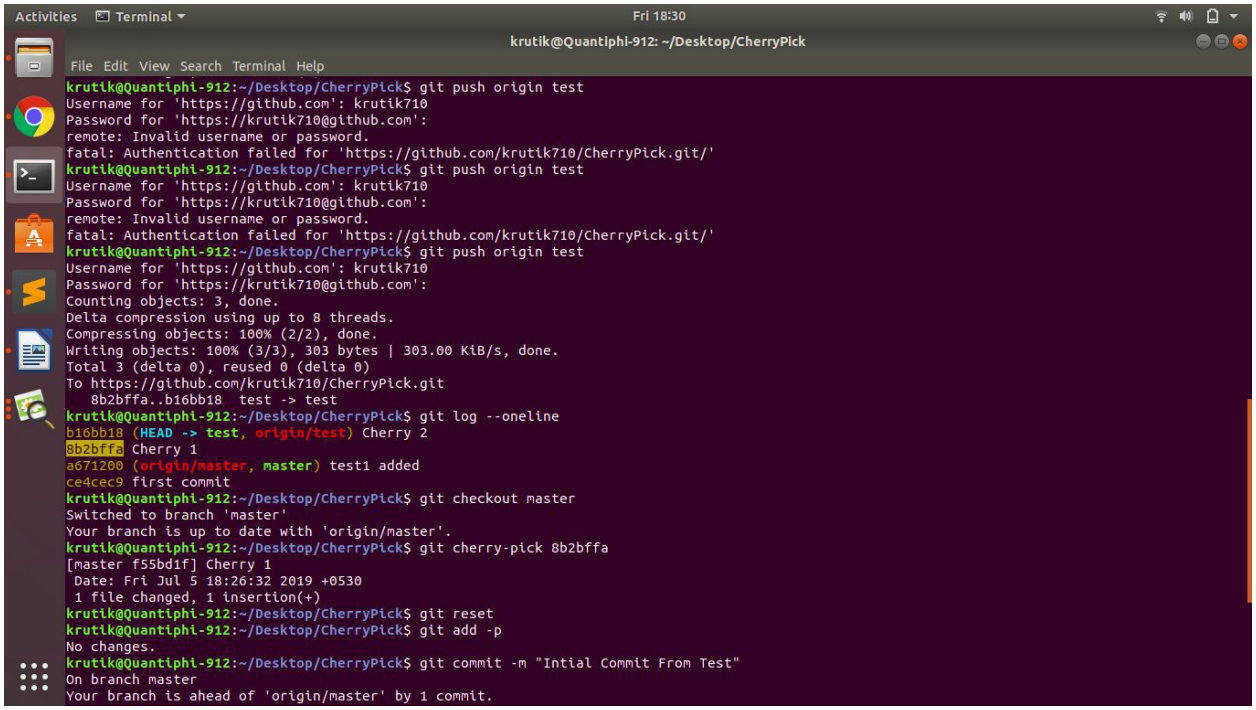
 # After making necessary changes in other branch, take the commit key from log of that branch
git log --oneline

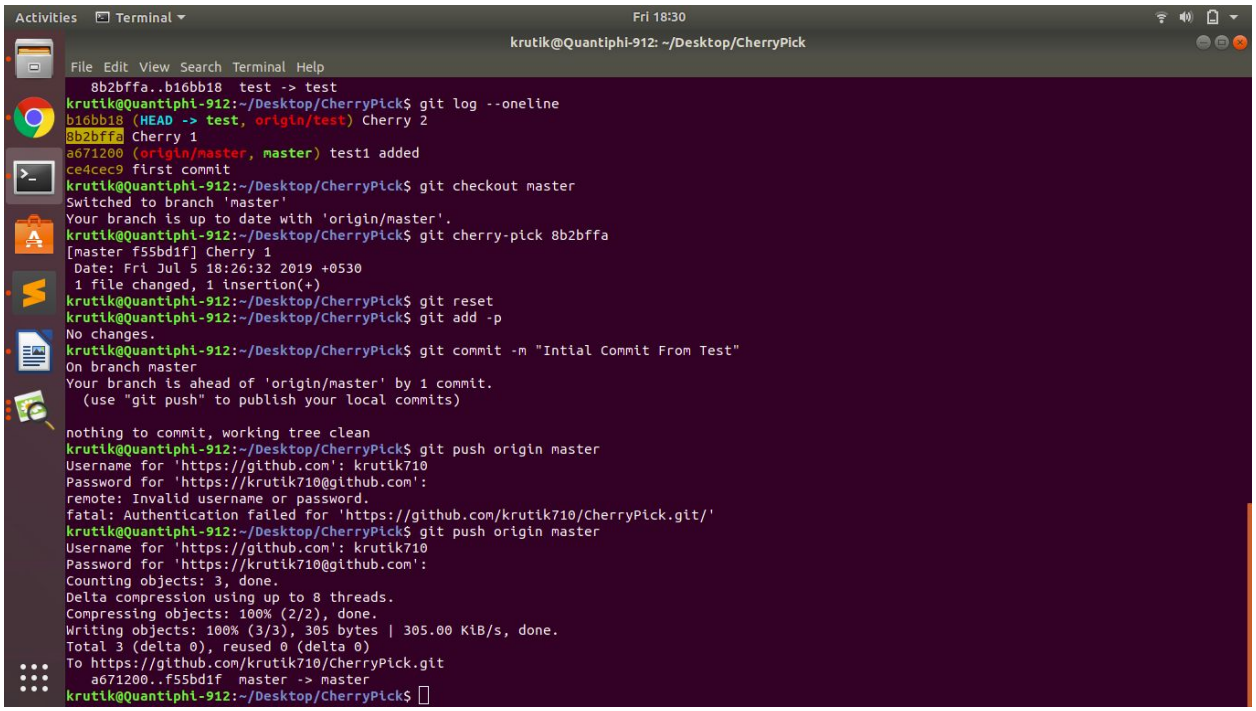
 # Check out to master
git checkout master

 # Cherry-pick helps to move to a specific commit of some other branch
git cherry-pick 8b2bffa

 # Reset, Add, Commit And Push changes
git reset
git add -p
git commit -m "Intial Commit From Test"
git push origin master




Activities
Terminal
Fri 18:30
krutik@Quantiphi-912: ~/Desktop/CherryPick
File Edit View Search Terminal Help
krutik@Quantiphi-912:~/Desktop/CherryPick$ git push origin test
Username for 'https://github.com': krutik710
Password for 'https://krutik710@github.com':
remote: Invalid username or password.
fatal: Authentication failed for 'https://github.com/krutik710/CherryPick.git/'
krutik@Quantiphi-912:~/Desktop/CherryPick$ git push origin test
Username for 'https://github.com': krutik710
Password for 'https://krutik710@github.com':
remote: Invalid username or password.
fatal: Authentication failed for 'https://github.com/krutik710/CherryPick.git/'
krutik@Quantiphi-912:~/Desktop/CherryPick$ git push origin test
Username for 'https://github.com': krutik710
Password for 'https://krutik710@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 0), reused 0 (delta 0)
To https://github.com/krutik710/CherryPick.git
8b2bffa..b16bb18 test -> test
krutik@Quantiphi-912:~/Desktop/CherryPick$ git log --oneline
b16bb18 (HEAD -> test, origin/test) Cherry 2
8b2bffa Cherry 1
a671200 (origin/master, master) test1 added
ce4cec9 first commit
krutik@Quantiphi-912:~/Desktop/CherryPick$ git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.
krutik@Quantiphi-912:~/Desktop/CherryPick$ git cherry-pick 8b2bffa
[master f55bd1f] Cherry 1
Date: Fri Jul 5 18:26:32 2019 +0530
1 file changed, 1 insertion(+)
krutik@Quantiphi-912:~/Desktop/CherryPick$ git reset
krutik@Quantiphi-912:~/Desktop/CherryPick$ git add -p
No changes.
krutik@Quantiphi-912:~/Desktop/CherryPick$ git commit -m "Intial Commit From Test"
On branch master
Your branch is ahead of 'origin/master' by 1 commit.


Activities
Terminal
Fri 18:30
krutik@Quantiphi-912: ~/Desktop/CherryPick
File Edit View Search Terminal Help
8b2bffa..b16bb18 test -> test
krutik@Quantiphi-912:~/Desktop/CherryPick$ git log --oneline
b16bb18 (HEAD -> test, origin/test) Cherry 2
8b2bffa Cherry 1
a671200 (origin/master, master) test1 added
ce4cec9 first commit
krutik@Quantiphi-912:~/Desktop/CherryPick$ git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.
krutik@Quantiphi-912:~/Desktop/CherryPick$ git cherry-pick 8b2bffa
[master f55bd1f] Cherry 1
Date: Fri Jul 5 18:26:32 2019 +0530
1 file changed, 1 insertion(+)
krutik@Quantiphi-912:~/Desktop/CherryPick$ git reset
krutik@Quantiphi-912:~/Desktop/CherryPick$ git add -p
No changes.
krutik@Quantiphi-912:~/Desktop/CherryPick$ git commit -m "Intial Commit From Test"
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
(use "git push" to publish your local commits)
nothing to commit, working tree clean
krutik@Quantiphi-912:~/Desktop/CherryPick$ git push origin master
Username for 'https://github.com': krutik710
Password for 'https://krutik710@github.com':
remote: Invalid username or password.
fatal: Authentication failed for 'https://github.com/krutik710/CherryPick.git/'
krutik@Quantiphi-912:~/Desktop/CherryPick$ git push origin master
Username for 'https://github.com': krutik710
Password for 'https://krutik710@github.com':
Counting objects: 3, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 305 bytes | 305.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To https://github.com/krutik710/CherryPick.git
a671200..f55bd1f master -> master
krutik@Quantiphi-912:~/Desktop/CherryPick$