

Module 2: Git Assignment - 4

1. Put master.txt on master branch, stage and commit.

Solution:-

```
$ sudo su
# apt update -y
```

```
ubuntu@ip-172-31-81-119:~$ sudo su
root@ip-172-31-81-119:/home/ubuntu# apt update -y
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [108 kB]
Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
```

```
# apt upgrade -y
# apt install git
# which git
# git --version
```

```
root@ip-172-31-81-119:/home/ubuntu# apt upgrade -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
#
# An OpenSSL vulnerability has recently been fixed with USN-6188-1 & 6119-1:
# CVE-2023-2650: possible DoS translating ASN.1 object identifiers.
# Ensure you have updated the package to its latest version.
#
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
root@ip-172-31-81-119:/home/ubuntu# apt install git
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
git is already the newest version (1:2.34.1-1ubuntu1.9).
git set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
root@ip-172-31-81-119:/home/ubuntu# which git
/usr/bin/git
root@ip-172-31-81-119:/home/ubuntu# git --version
git version 2.34.1
```

```
# git config --global user.name "Amit Tiwari"
# git config --global user.email "redhat.amitiwari@gmail.com"
# git config --list
```

```
root@ip-172-31-81-119:/home/ubuntu# git config --global user.name "Amit Tiwari"
root@ip-172-31-81-119:/home/ubuntu# git config --global user.email "redhat.amitiwari@gmail.com"
root@ip-172-31-81-119:/home/ubuntu# git config --list
user.name=Amit Tiwari
user.email=redhat.amitiwari@gmail.com
```

```
# mkdir gitdir
# cd gitdir
```

```
root@ip-172-31-81-119:/home/ubuntu# mkdir gitdir
root@ip-172-31-81-119:/home/ubuntu# cd gitdir/
root@ip-172-31-81-119:/home/ubuntu/gitdir#
```

```
# git init
# git status
```

```
root@ip-172-31-81-119:/home/ubuntu/gitdir# git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/ubuntu/gitdir/.git/
root@ip-172-31-81-119:/home/ubuntu/gitdir# git status
On branch master

No commits yet

nothing to commit (create/copy files and use "git add" to track)
```

```
# touch master.txt
# git add master.txt
# git commit -m "This is my first commit into master branch."
master.txt
# git status
# git branch
```

```
root@ip-172-31-81-119:/home/ubuntu/gitdir# touch master.txt
root@ip-172-31-81-119:/home/ubuntu/gitdir# git add master.txt
root@ip-172-31-81-119:/home/ubuntu/gitdir# git commit -m "This is my first commit into master branch." master.txt
[master (root-commit) a2c36f4] This is my first commit into master branch.
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 master.txt
root@ip-172-31-81-119:/home/ubuntu/gitdir# git status
On branch master

nothing to commit, working tree clean
root@ip-172-31-81-119:/home/ubuntu/gitdir# git branch
* master
```

2. Create 3 branches: public 1, public 2 and private.

Solution:-

```
# git branch public_1 && git branch public_2 && git branch private
```

```
root@ip-172-31-81-119:/home/ubuntu/gitdir# git branch
* master
root@ip-172-31-81-119:/home/ubuntu/gitdir# git branch public_1 && git branch public_2 && git branch private
root@ip-172-31-81-119:/home/ubuntu/gitdir# git branch
* master
  private
  public_1
  public_2
root@ip-172-31-81-119:/home/ubuntu/gitdir#
```

3. Put public1.txt on public 1 branch, stage and commit

Solution:-

```
# touch public1.txt
# git checkout public_1
# git branch
# git add public1.txt
```

```
root@ip-172-31-81-119:/home/ubuntu/gitdir# touch public1.txt
root@ip-172-31-81-119:/home/ubuntu/gitdir# git checkout public_1
Switched to branch 'public_1'
root@ip-172-31-81-119:/home/ubuntu/gitdir# git branch
  master
  private
* public_1
  public_2
root@ip-172-31-81-119:/home/ubuntu/gitdir# git add public1.txt
```

```
# git commit -m "This is my first commit into public_1 branch of public1.txt file." public1.txt
```

```
root@ip-172-31-81-119:/home/ubuntu/gitdir# git commit -m "This is my first commit into public_1 branch of public1.txt file." public1.txt
[public_1 fab3cf2] This is my first commit into public_1 branch of public1.txt file.
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 public1.txt
root@ip-172-31-81-119:/home/ubuntu/gitdir#
```

4. Merge public 1 on master branch.

Solution:-

```
# git checkout master
# git branch
# git merge public_1
```

```
root@ip-172-31-81-119:/home/ubuntu/gitdir# git checkout master
Switched to branch 'master'
root@ip-172-31-81-119:/home/ubuntu/gitdir# git branch
* master
  private
  public_1
  public_2
root@ip-172-31-81-119:/home/ubuntu/gitdir# git merge public_1
Updating a2c36f4..fab3cf2
Fast-forward
 public1.txt | 0
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 public1.txt
```

5. Merge public 2 on master branch

Solution:-

```
# git merge public_2
```

```
root@ip-172-31-81-119:/home/ubuntu/gitdir# git merge public_2
Already up to date.
```

6. Edit master.txt on private branch, stage and commit.

Solution:-

```
# git checkout private
# git branch
# vi master.txt
This file is edited in private branch.
# git add master.txt
# git commit -m "This is commit of master.txt file after re-commit it
into private branch." master.txt
```

```
root@ip-172-31-81-119:/home/ubuntu/gitdir# git checkout private
Switched to branch 'private'
root@ip-172-31-81-119:/home/ubuntu/gitdir# git branch
  master
* private
  public_1
  public_2
root@ip-172-31-81-119:/home/ubuntu/gitdir# vi master.txt
root@ip-172-31-81-119:/home/ubuntu/gitdir# git add master.txt
root@ip-172-31-81-119:/home/ubuntu/gitdir# git commit -m "This is commit of mast
er.txt file after re-commit it into private branch." master.txt
[private 9a52b00] This is commit of master.txt file after re-commit it into priv
ate branch.
 1 file changed, 1 insertion(+)
```


7. Now update branch public 1 and public 2 with new master code in private.

Solution:-

```
# git checkout public_1
# git branch
# git rebase private
```

```
root@ip-172-31-81-119:/home/ubuntu/gitdir# git checkout public_1
Switched to branch 'public_1'
root@ip-172-31-81-119:/home/ubuntu/gitdir# git branch
  master
  private
* public_1
  public_2
root@ip-172-31-81-119:/home/ubuntu/gitdir# git rebase private
Successfully rebased and updated refs/heads/public_1.
root@ip-172-31-81-119:/home/ubuntu/gitdir# cat master.txt
This file is edited in private branch.
```

```
# git branch
# git checkout public_2
# git rebase private
```

```
root@ip-172-31-81-119:/home/ubuntu/gitdir# git branch
  master
  private
* public_1
  public_2
root@ip-172-31-81-119:/home/ubuntu/gitdir# git checkout public_2
Switched to branch 'public_2'
root@ip-172-31-81-119:/home/ubuntu/gitdir# git rebase private
Successfully rebased and updated refs/heads/public_2.
root@ip-172-31-81-119:/home/ubuntu/gitdir# cat master.txt
This file is edited in private branch.
```

8. Also update new master code on master.

Solution:-

```
# git checkout master
# git branch
# git rebase private
```

```
root@ip-172-31-81-119:/home/ubuntu/gitdir# git checkout master
Switched to branch 'master'
root@ip-172-31-81-119:/home/ubuntu/gitdir# git branch
* master
  private
  public_1
  public_2
root@ip-172-31-81-119:/home/ubuntu/gitdir# git rebase private
Successfully rebased and updated refs/heads/master.
```

9. Finally update all the code on the private branch.

Solution:-

```
# git checkout public_1
# git branch
# git merge private
```

```
root@ip-172-31-81-119:/home/ubuntu/gitdir# git checkout public_1
Switched to branch 'public_1'
root@ip-172-31-81-119:/home/ubuntu/gitdir# git branch
  master
  private
* public_1
  public_2
root@ip-172-31-81-119:/home/ubuntu/gitdir# git merge private
Already up to date.
```

```
# git branch
# git checkout public_2
# git merge private
# git branch
# git checkout master
# git merge private
```

```
root@ip-172-31-81-119:/home/ubuntu/gitdir# git branch
  master
  private
* public_1
  public_2
root@ip-172-31-81-119:/home/ubuntu/gitdir# git checkout public_2
Switched to branch 'public_2'
root@ip-172-31-81-119:/home/ubuntu/gitdir# git merge private
Already up to date.
root@ip-172-31-81-119:/home/ubuntu/gitdir# git branch
  master
  private
  public_1
* public_2
root@ip-172-31-81-119:/home/ubuntu/gitdir# git checkout master
Switched to branch 'master'
root@ip-172-31-81-119:/home/ubuntu/gitdir# git merge private
Already up to date.
```