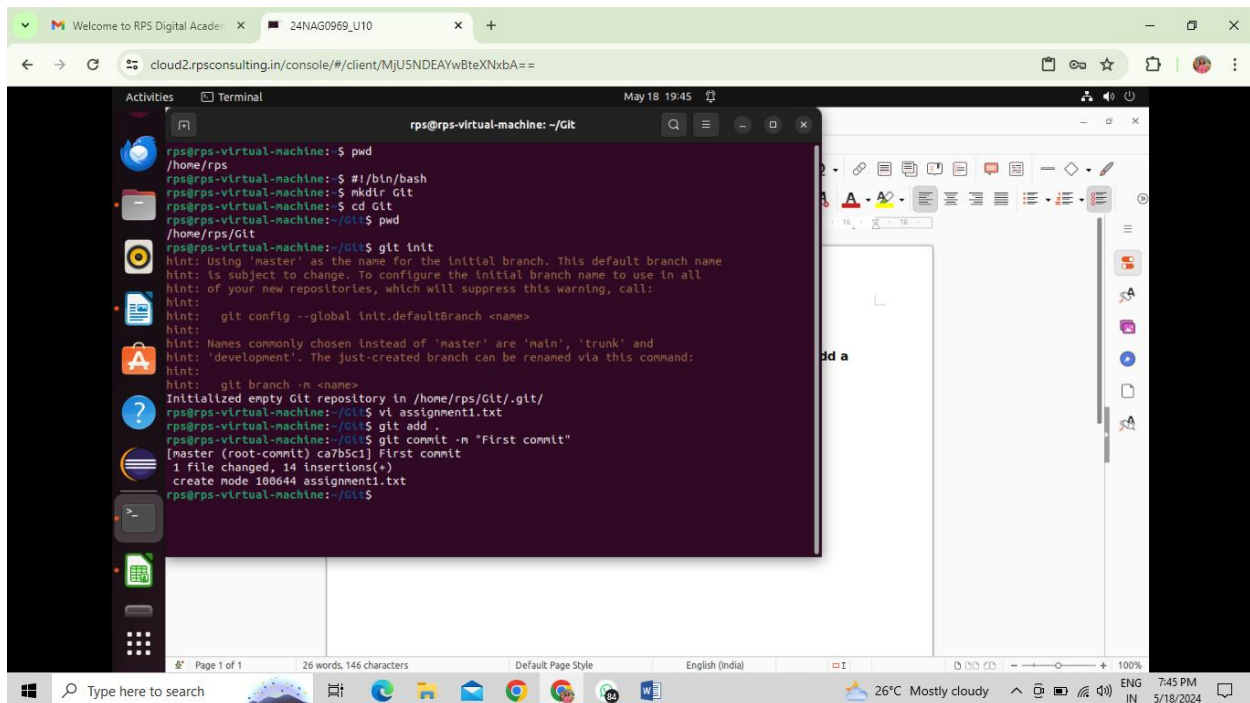
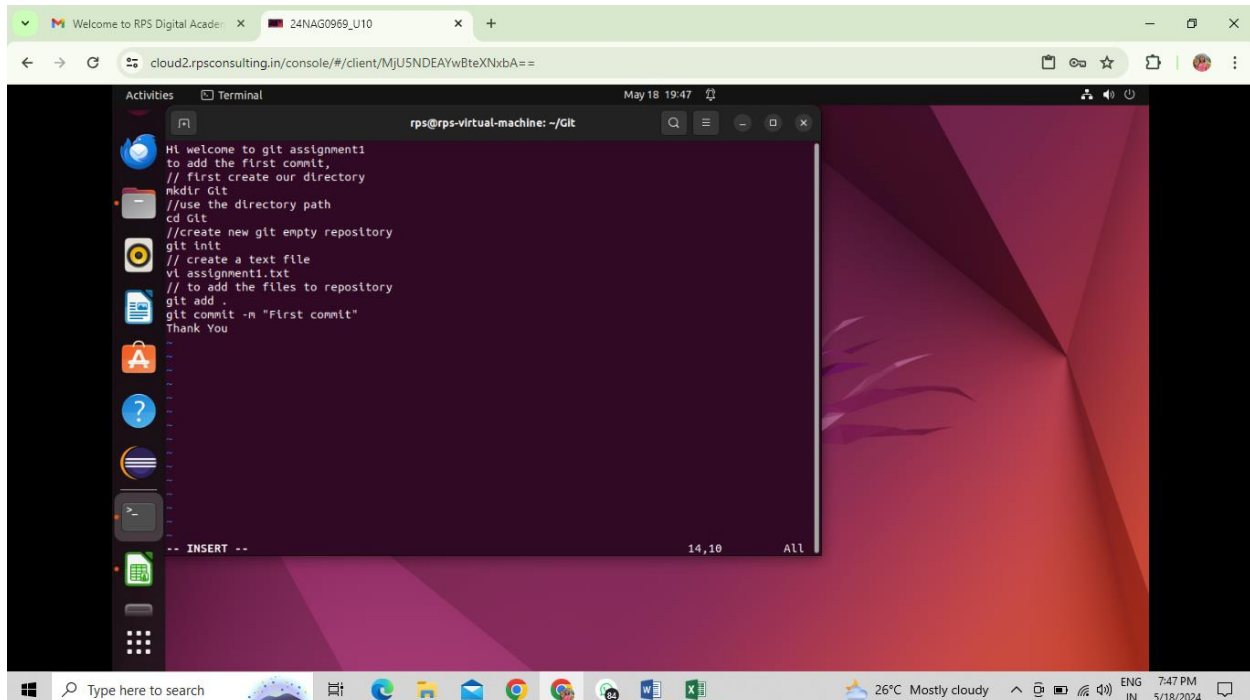


ASSIGNMENT-06

1] Initialize a new Git repository in a directory of your choice. Add a simple text file to the repository and make the first commit.



```
rps@rps-virtual-machine: ~$ pwd
/home/rps
rps@rps-virtual-machine: ~$ #!/bin/bash
rps@rps-virtual-machine: ~$ mkdir Git
rps@rps-virtual-machine: ~$ cd Git
rps@rps-virtual-machine: ~/Git$ pwd
/home/rps/Git
rps@rps-virtual-machine: ~/Git$ 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/rps/Git/.git/
rps@rps-virtual-machine: ~/Git$ vi assignment1.txt
rps@rps-virtual-machine: ~/Git$ git add .
rps@rps-virtual-machine: ~/Git$ git commit -m "First commit"
[master (root-commit) ca7b5c1] First commit
1 file changed, 14 insertions(+)
create mode 100644 assignment1.txt
rps@rps-virtual-machine: ~/Git$
```

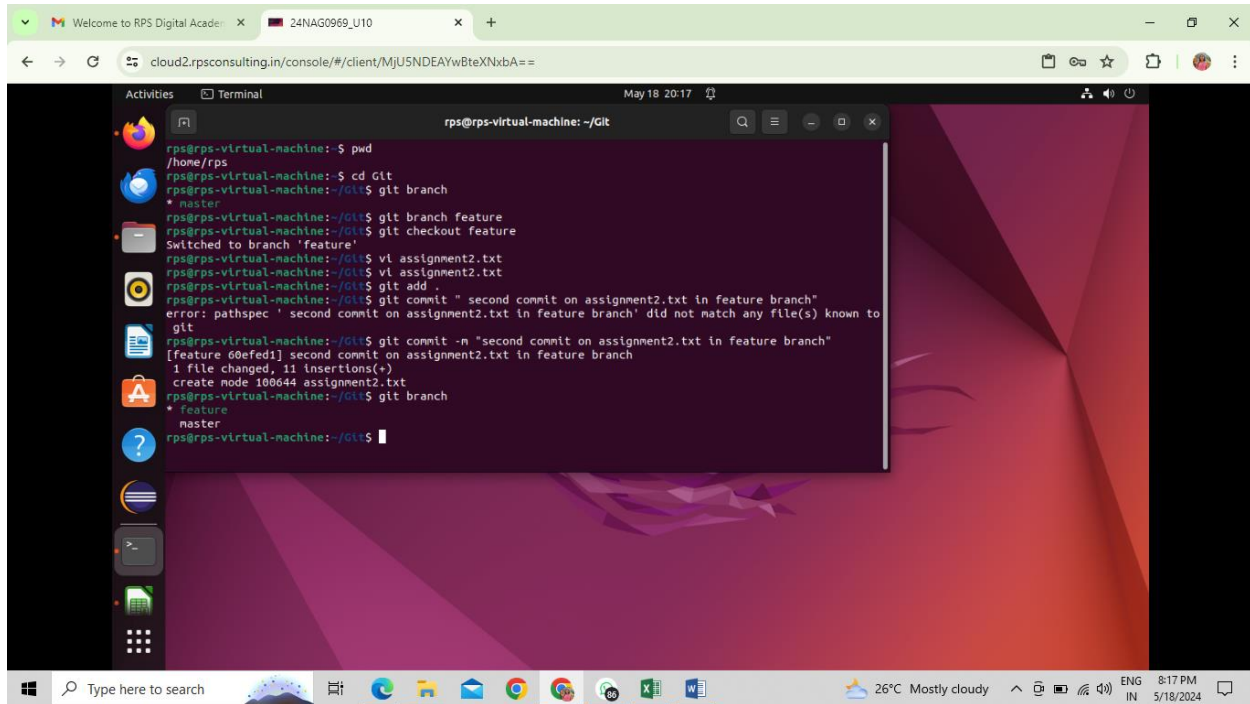


```
Hi welcome to git assignment1
to add the first commit,
// first create our directory
mkdir Git
//use the directory path
cd Git
//create new git empty repository
git init
// create a text file
vi assignment1.txt
// to add the files to repository
git add .
git commit -m "First commit"
Thank You

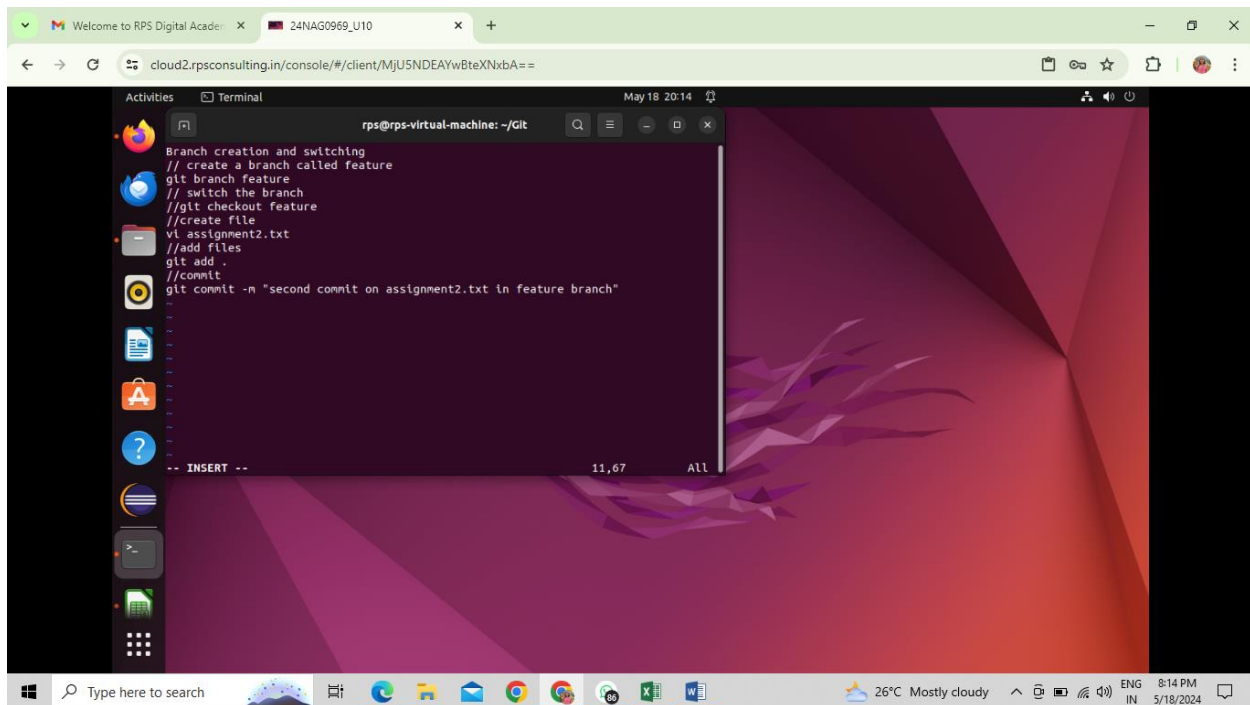
-- INSERT --
```

2] Branch Creation and Switching

Create a new branch named 'feature' and switch to it. Make changes in the 'feature' branch and commit them.



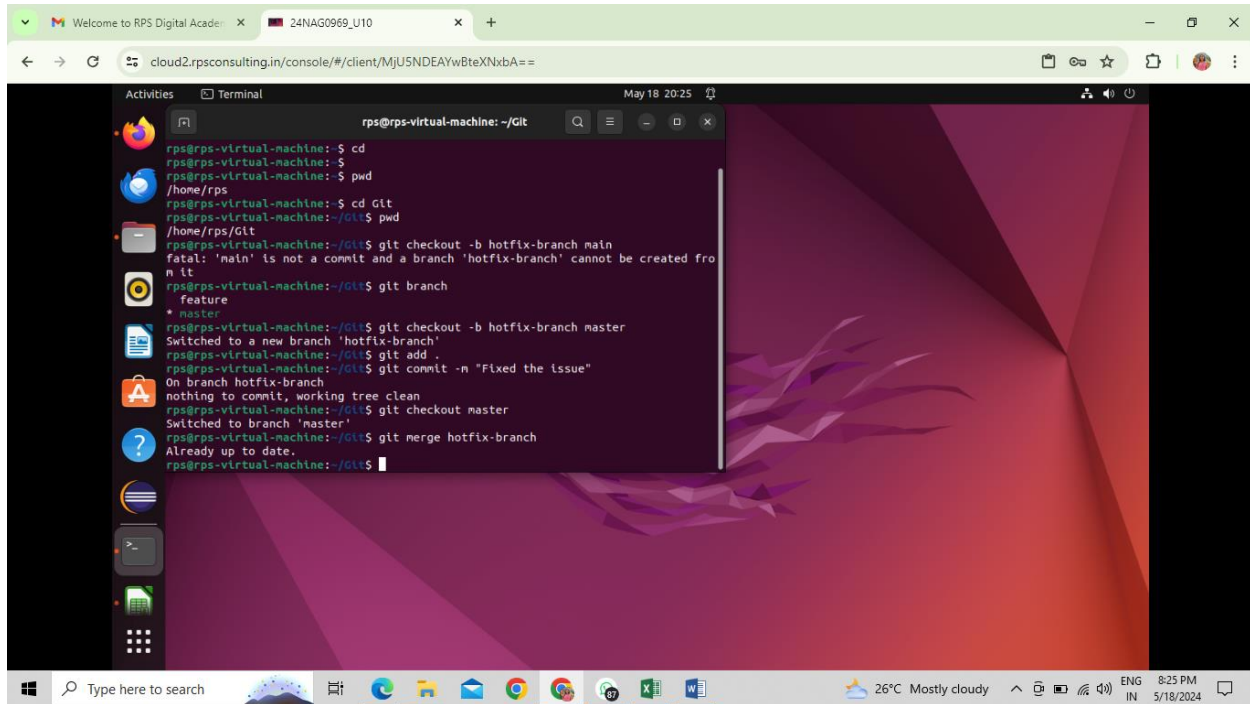
```
rps@rps-virtual-machine: ~/Git
rps@rps-virtual-machine:~$ pwd
/home/rps
rps@rps-virtual-machine:~$ cd git
rps@rps-virtual-machine:~/git$ git branch
* master
rps@rps-virtual-machine:~/git$ git branch feature
rps@rps-virtual-machine:~/git$ git checkout feature
Switched to branch 'feature'
rps@rps-virtual-machine:~/git$ vi assignment2.txt
rps@rps-virtual-machine:~/git$ git add .
rps@rps-virtual-machine:~/git$ git commit "second commit on assignment2.txt in feature branch"
error: pathspec 'second commit on assignment2.txt in feature branch' did not match any file(s) known to git
rps@rps-virtual-machine:~/git$ git commit -m "second commit on assignment2.txt in feature branch"
[feature 60efed1] second commit on assignment2.txt in feature branch
1 file changed, 11 insertions(+)
create mode 100644 assignment2.txt
rps@rps-virtual-machine:~/git$ git branch
* feature
  master
rps@rps-virtual-machine:~/git$
```



```
Branch creation and switching
// create a branch called feature
git branch feature
// switch the branch
git checkout feature
//create file
vi assignment2.txt
//add files
git add .
//commit
git commit -m "second commit on assignment2.txt in feature branch"
```

3] Feature Branches and Hotfixes

Create a 'hotfix' branch to fix an issue in the main code. Merge the 'hotfix' branch into 'main' ensuring that the issue is resolved.



The screenshot shows a terminal window on a Linux desktop environment. The terminal displays the following sequence of commands and their outputs:

```
rps@rps-virtual-machine: ~/Git
rps@rps-virtual-machine: $ cd
rps@rps-virtual-machine: $
rps@rps-virtual-machine: $ pwd
/home/rps
rps@rps-virtual-machine: $ cd Git
rps@rps-virtual-machine: ~/Git $ pwd
/home/rps/Git
rps@rps-virtual-machine: ~/Git $ git checkout -b hotfix-branch main
fatal: 'main' is not a commit and a branch 'hotfix-branch' cannot be created from it
rps@rps-virtual-machine: ~/Git $ git branch
* master
rps@rps-virtual-machine: ~/Git $ git checkout -b hotfix-branch master
Switched to a new branch 'hotfix-branch'
rps@rps-virtual-machine: ~/Git $ git add .
rps@rps-virtual-machine: ~/Git $ git commit -m "Fixed the issue"
On branch hotfix-branch
nothing to commit, working tree clean
rps@rps-virtual-machine: ~/Git $ git checkout master
Switched to branch 'master'
rps@rps-virtual-machine: ~/Git $ git merge hotfix-branch
Already up to date.
rps@rps-virtual-machine: ~/Git $
```

The desktop background is a purple and red geometric pattern. The terminal window has a dark theme. The system tray at the bottom shows the date and time as 8:25 PM on 5/18/2024, along with weather information (26°C Mostly cloudy) and system icons.