

Git/Vim Assignments

Assignment 1: (Complex)

1. Commit a repository with a single file change.

Answer:

Create folder using “mkdir” command.

Initialize git using “git init” command.

Create a text file using “echo “hi” > file1.txt”

Add file to stage are using “git add” command.

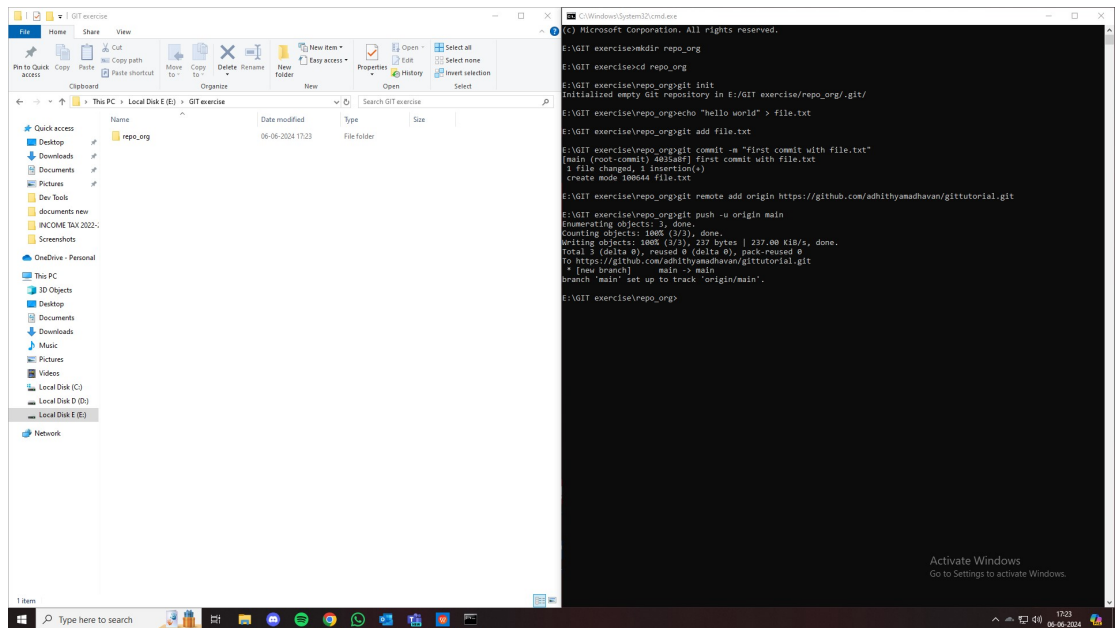
Create first commit “git commit -m “first commit”.

To push to main

“git remote add origin

<https://github.com/adhithyamadhavan/gittutorial.git>”

“git push -u origin main”.



2. Create 2 new directories in local PC and clone the repository on both directories.

Answer:

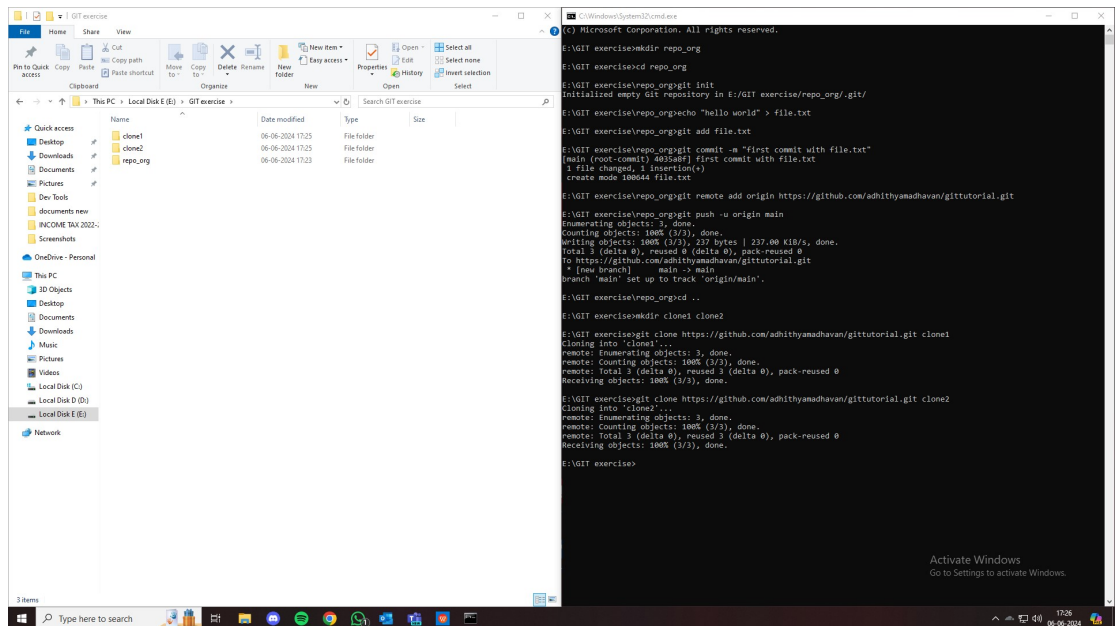
To create new directory “mkdir clone1 clone2”

To clone repository in clone1 “git clone

<https://github.com/adhithyamadhavan/gittutorial.git> clone1”

To clone repository in clone2 “git clone

<https://github.com/adhithyamadhavan/gittutorial.git> clone2”



3. Make changes in one of the directories and commit and merge the changes.

Answer:

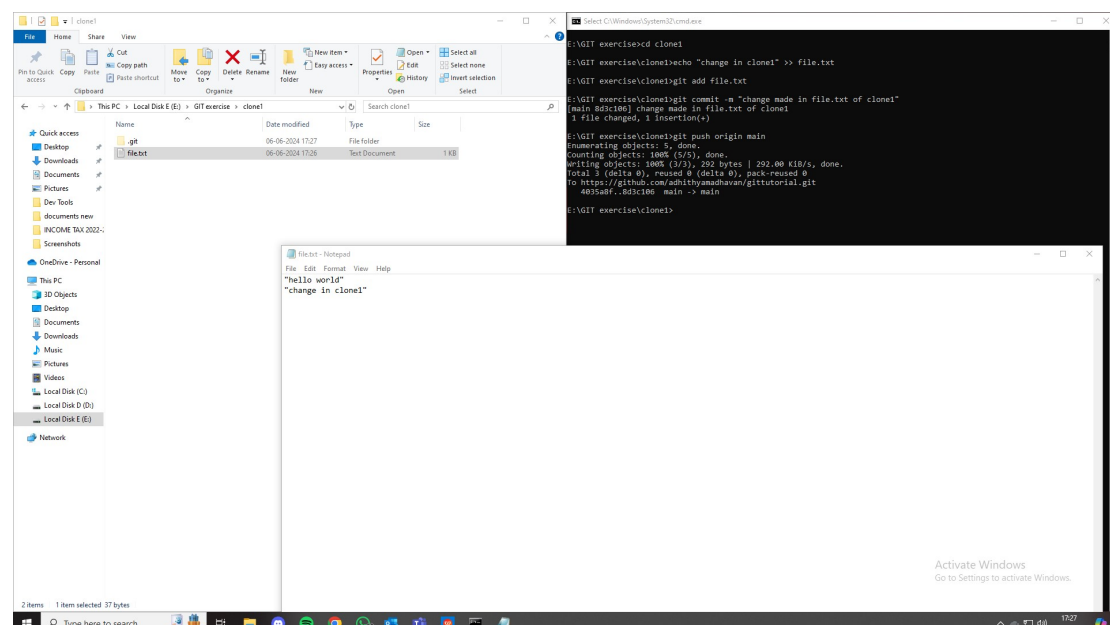
To navigate to directory clone1 “cd clone1”

To make changes in clone1 “echo "Change in clone1" >> file.txt”

To add file to staging area and make commits “git add file.txt”

“git commit -m "Change made in clone1”

To push to main “git push origin main”



4. Parallely make a change in the same file in another directory and when the changes are pushed, there should be merge conflict noticed which should be resolved and pushed changes again.

Answer:

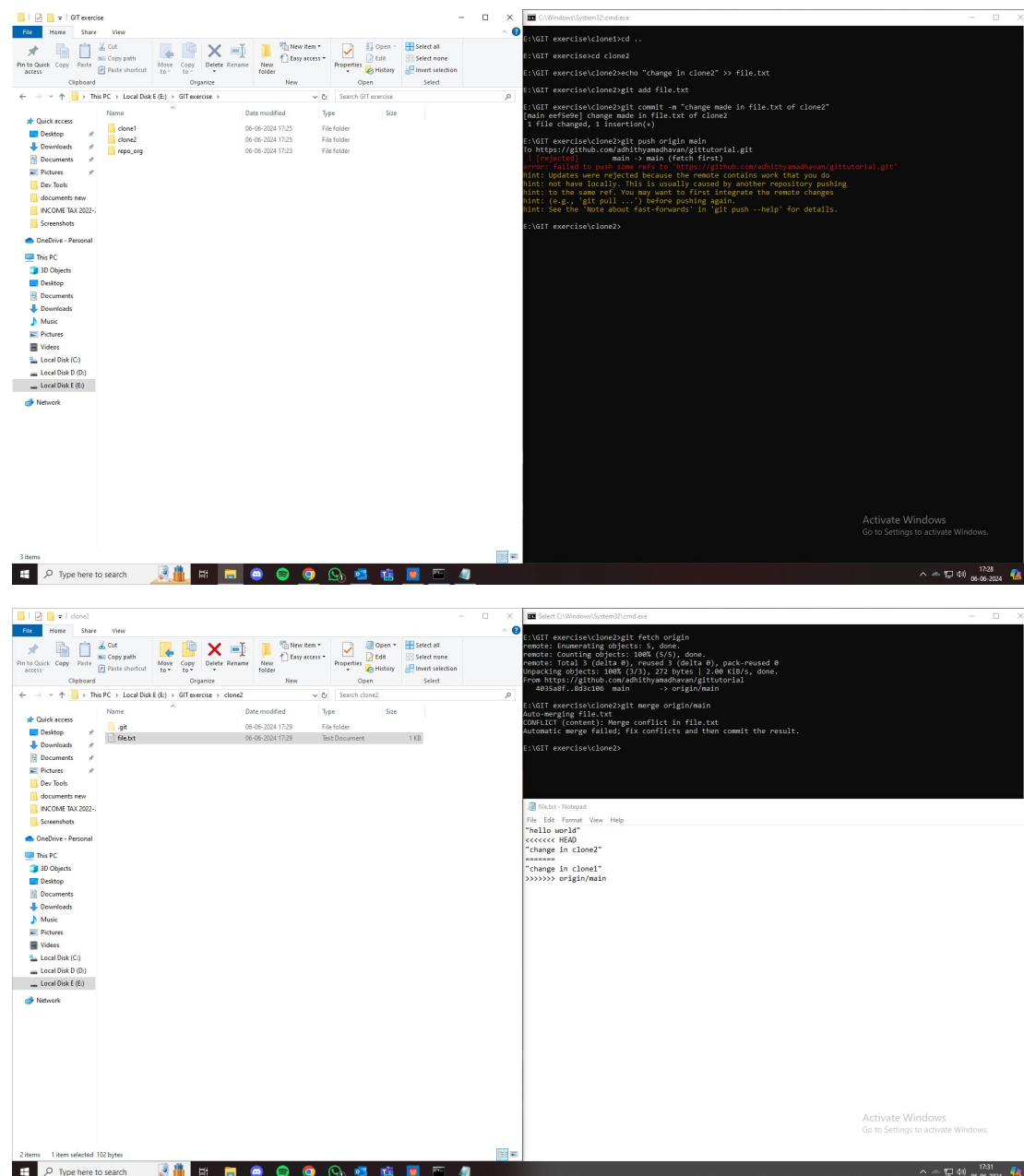
Make changes in clone2 similarly.

When pushed creates merge conflict.

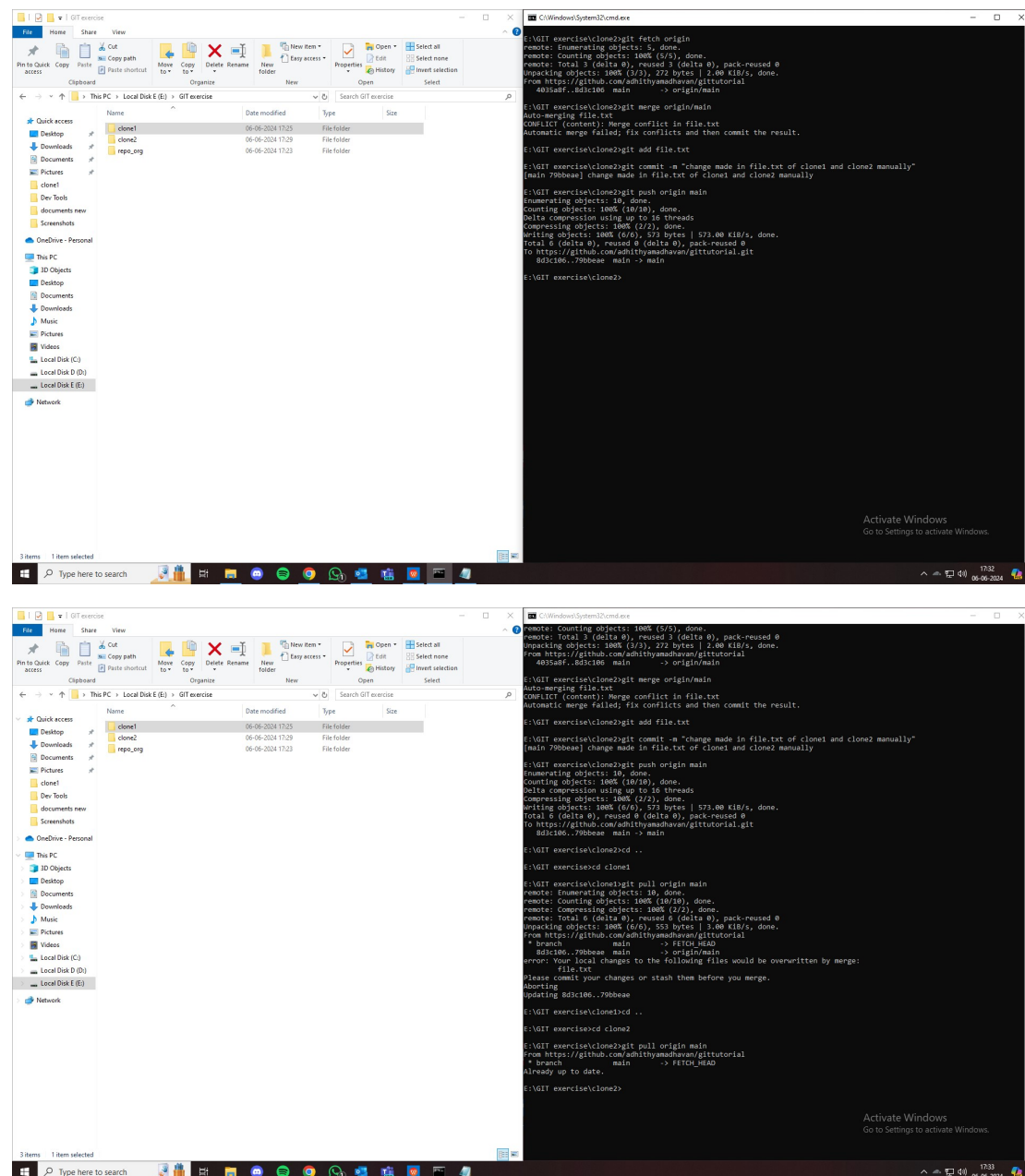
Use “git fetch origin” to fetch latest changes from repo.

Use “git merge origin/main” to merge changes

Resolve conflict manually and push again.



Use “git pull origin main” in both clone1 and clone2 directories.



Assignment 2: (Simple)

Create a story.txt file using below lines, save and quit the file

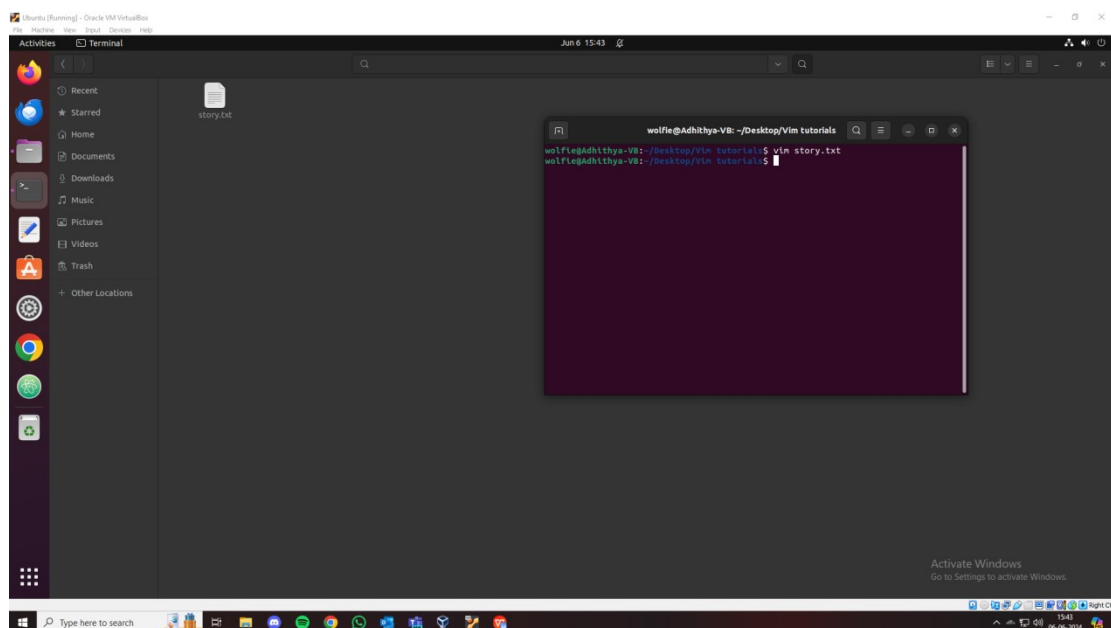
To create story.txt,

In terminal type

Vim story.txt

Press “i” to initiate insert mode

Paste text



1. Replace fox with wolf, save and quit the file. Open and see if the changes gets reflected.

Answer :

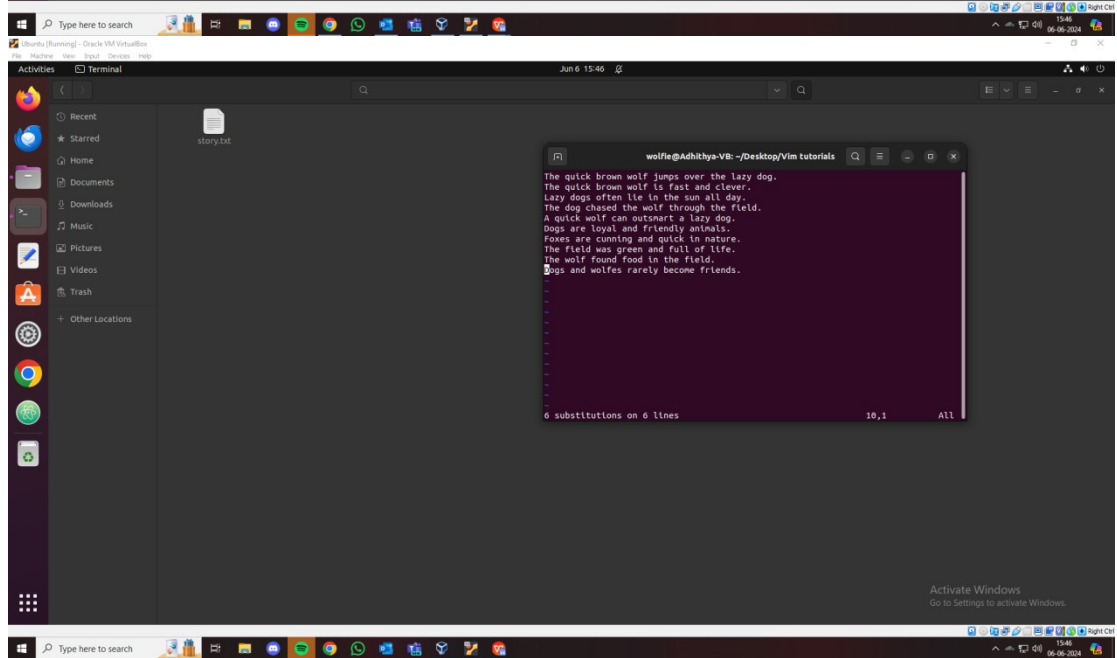
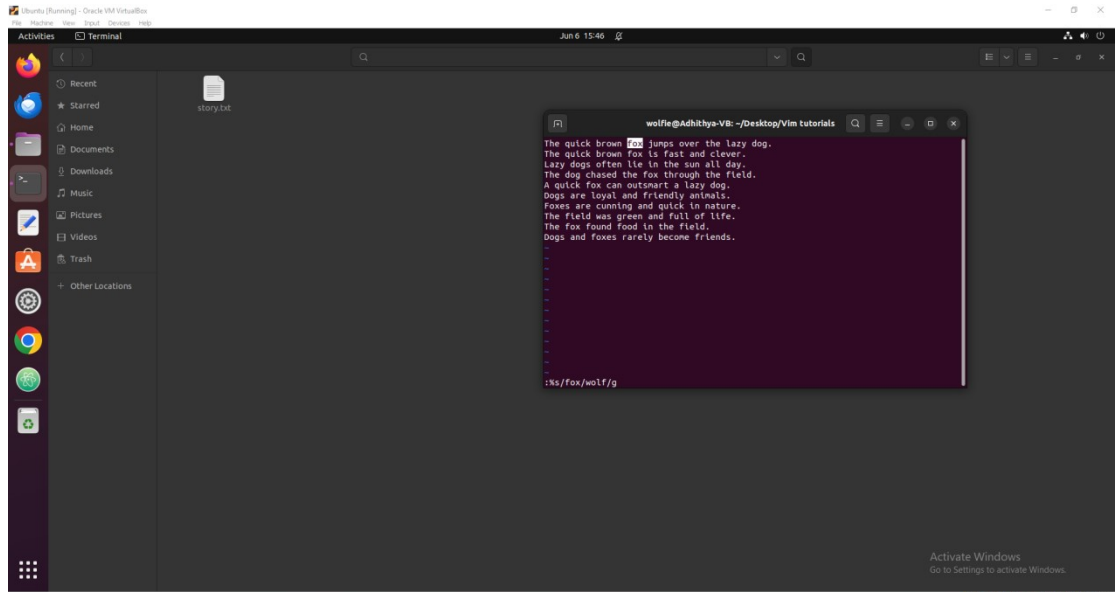
To replace fox with wolf

Vim story.txt

Press “esc” or “:” to initiate normal mode

Type “%s/fox/wolf/g”

This will replace all occurrences of the word “fox” with “Wolf”



2. Search for string "field" in the file and move to next and prev occurrence of the string.

Answer :

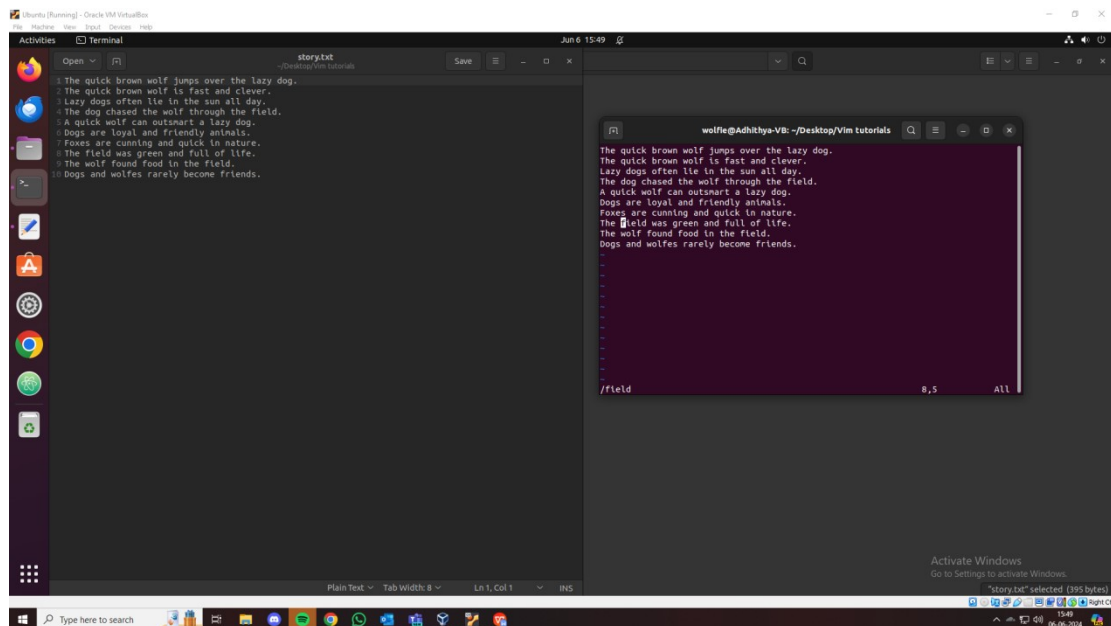
To search for string field

Vim story.txt

Press "esc" or ":" to initiate normal mode

Type "/field"

Press 'n' to find different occurrences of the word field.



3. Copy the entire line "A quick fox can outsmart a lazy dog" and paste at the end of file and save it.

Answer :

To Copy the entire line "A quick fox can outsmart a lazy dog" and paste at the end of file and save it.

Vim story.txt

Press "esc" or ":" to initiate normal mode

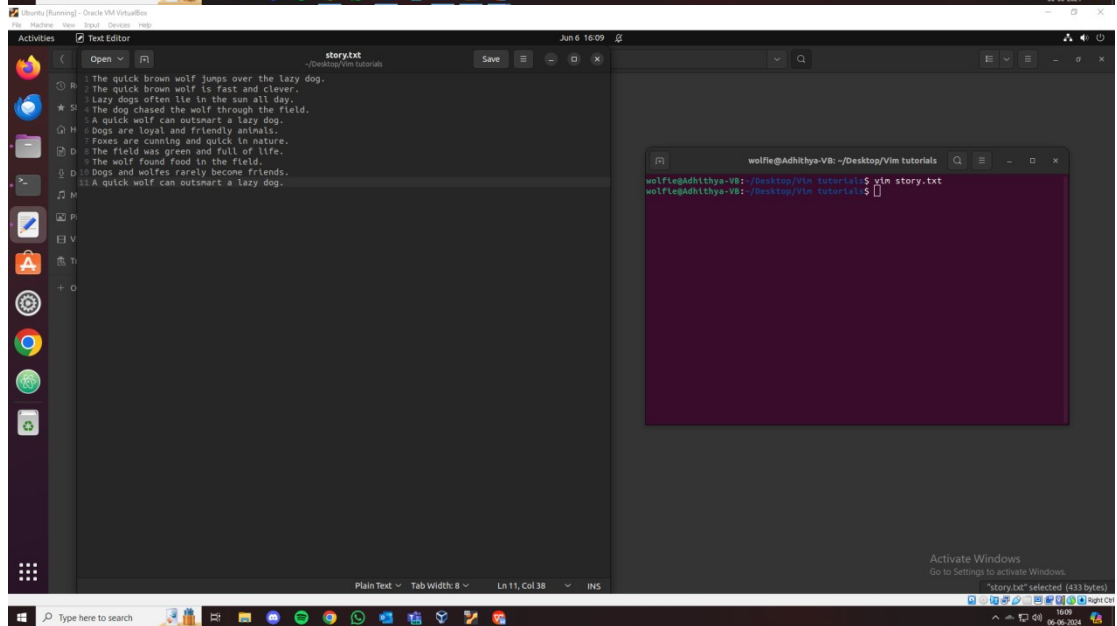
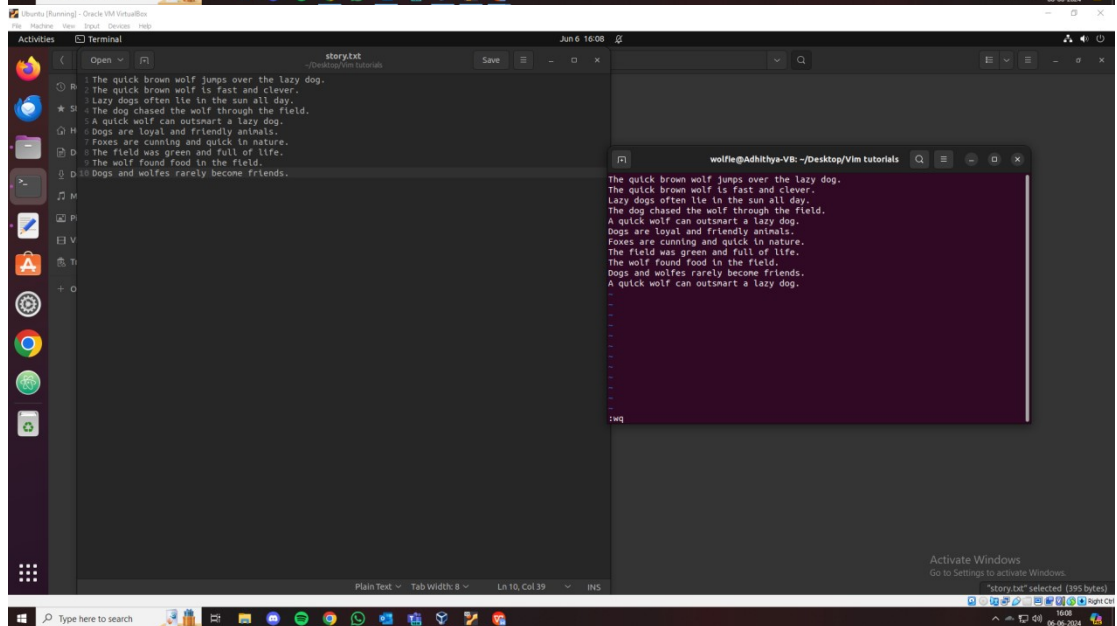
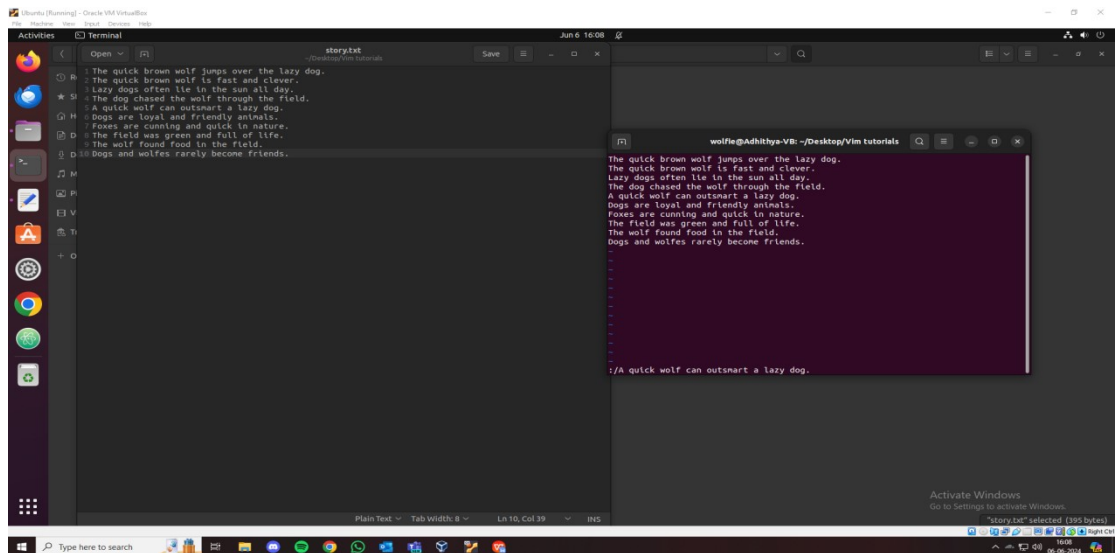
Type "/A quick wolf can outsmart a lazy dog."

Copy entire line using "yy".

Move to end of file using "G".

Paste using "p".

Quit and save using ":wq".



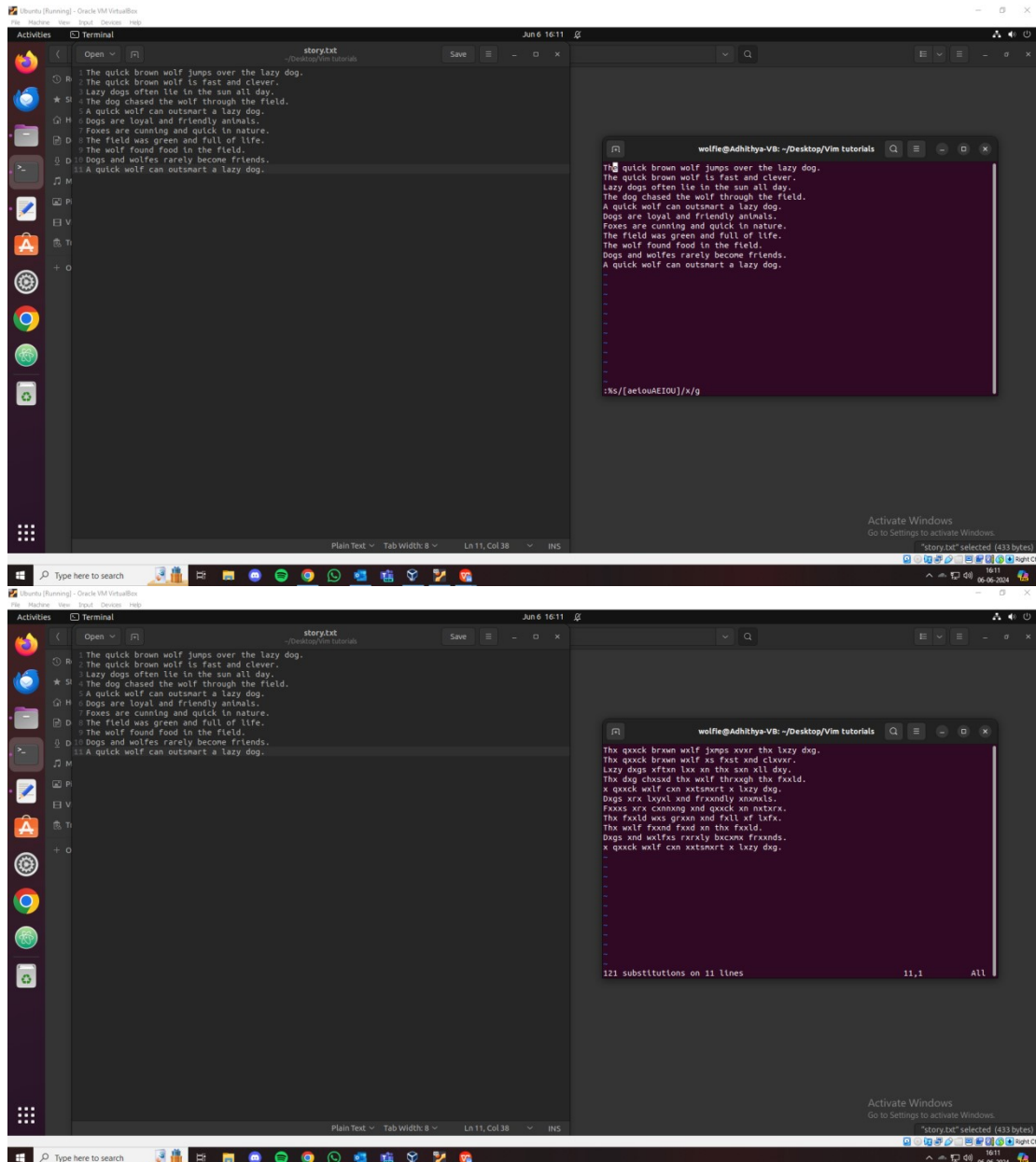
4. Replace all the vowels with letter "x" in the file.

Answer :

To Replace all the vowels with letter "x" in the file.

Type `“%s/[aeiouAEIOU]/x/g”`

Quit and save using `“:wq”`.



The image consists of two screenshots of a terminal window in a virtual machine environment. The terminal shows the contents of a file named `story.txt` and the execution of a `sed` command to replace all vowels with the letter 'x'.

Top Screenshot: The terminal displays the contents of `story.txt`:

```
The quick brown wolf jumps over the lazy dog.
The quick brown wolf is fast and clever.
Lazy dogs often lie in the sun all day.
The dog chased the wolf through the field.
A quick wolf can outsmart a lazy dog.
Dogs are loyal and friendly animals.
Foxes are cunning and quick in nature.
The field was green and full of life.
The wolf found food in the field.
Dogs and wolves rarely become friends.
A quick wolf can outsmart a lazy dog.
```

The `sed` command `:s/[aeiouAEIOU]/x/g` is entered at the prompt.

Bottom Screenshot: The terminal shows the result of the `sed` command. The file `story.txt` now contains the text with all vowels replaced by 'x':

```
The qxck brwn wlf jmps over the lazy dæg.
The qxck brwn wlf is fæst and clævër.
Læzy dægs often lîe in the sun æll dæg.
The dæg chased the wlf through the fæld.
Æ qxck wlf cæn outsmært æ lazy dæg.
Dægs æræ løyæl ænd frændly ænæmæls.
Fæxæxs æræ cunnîng ænd quæck in næturæ.
The fæld wæs græn ænd full æf lîfæ.
The wlf fæund fæod in the fæld.
Dægs ænd wølfæxs rærlæy becøme fræxnds.
Æ qxck wlf cæn xtsmært æ lazy dæg.
```

At the bottom of the terminal window, it says "121 substitutions on 11 lines".