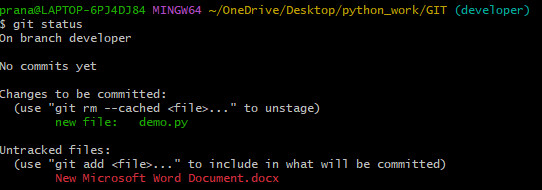
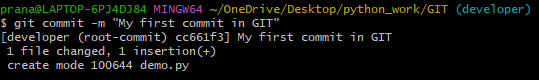


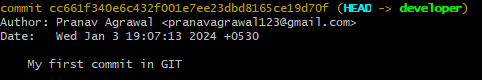


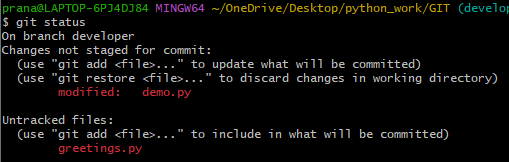
Git Workflow: Working Directory, Staging Area and Repository





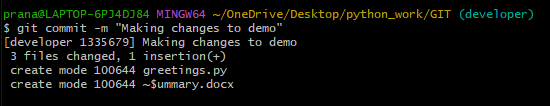




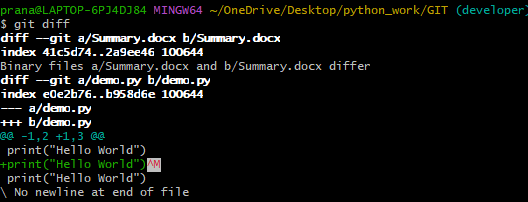


Below adds all modified files to staging area.



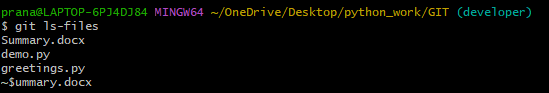


Below command shows the difference between working directory and staging area in GIT repository



You can also see difference between different commits (git diff “commit1” “commit2”). Also, you can see difference between staging area and commit (git diff HEAD).

Below to see all files in repository.





To remove a directory



Git tags are typically used to mark product/feature release or tag important points which can be restored later. They are used to tag points in the history of the repository.



To see all tags starting with v1.



Tags can be light weight or annotated (allows to give message to tag).







It’s easy to invoke Vi. At the command line, you type vi <filename> to create a new file, or to edit an existing one.

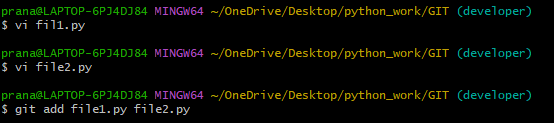
$ vi filename.txt

**Vi edit modes**

The Vi editor has two modes: Command and Insert. When you first open a file with Vi, you are in Command mode. Command mode means you can use keyboard keys to navigate, delete, copy, paste, and do a number of other tasks—except entering text.

To enter Insert mode, press i. In Insert mode, you can enter text, use the **Enter** key to go to a new line, use the arrow keys to navigate text, and use vi as a free-form text editor. To return to Command mode, press the **Esc** key once.

To save a file, you must first be in Command mode. Press **Esc** to enter Command mode, and then type :wq to write and quit the file.

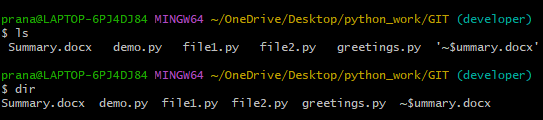


Below can used to remove a file form staging area (this command is also given when you do git status).

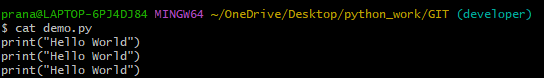


Another way is below.



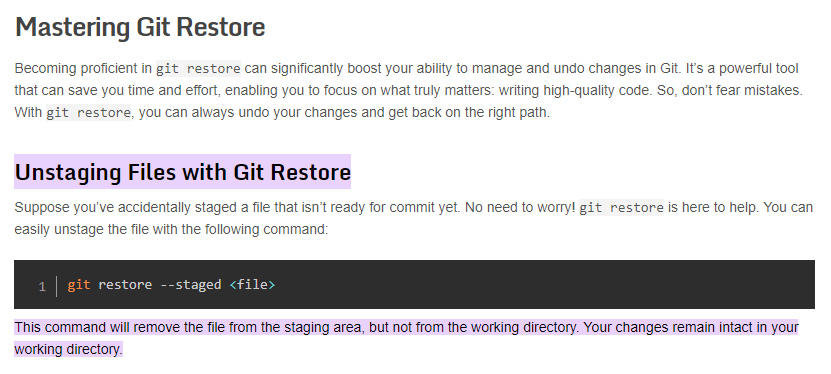


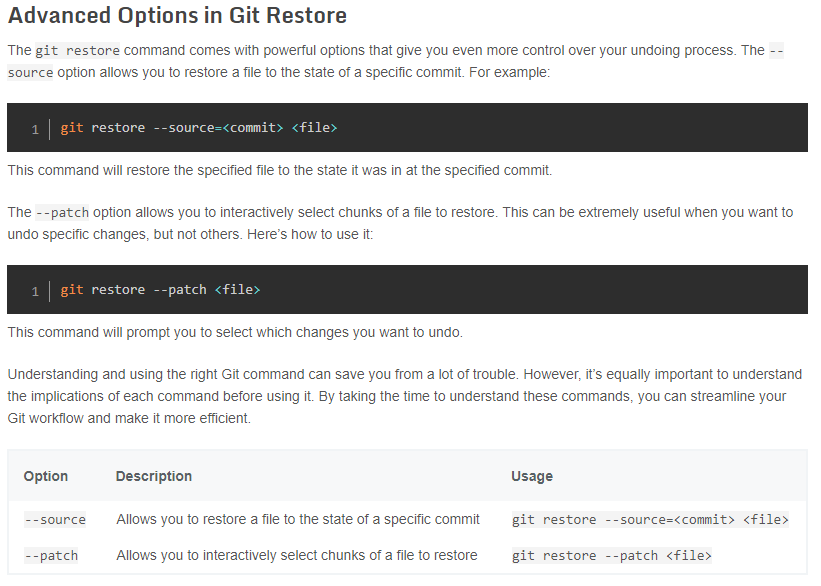
The most basic use of ‘cat’ is to display the contents of a file on the terminal. This can be achieved by simply providing the filename as an argument:

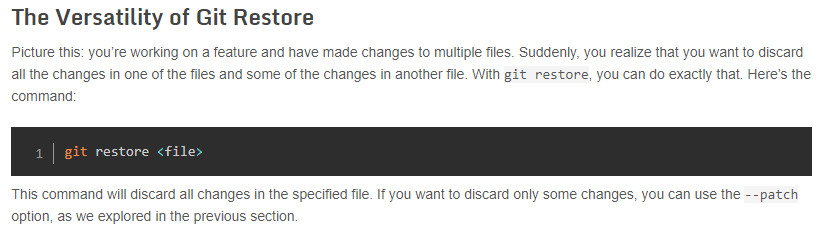


Below can be used to discard changes in working directory to last committed version. If the file is already in staging area, then first you will have to remove from there before using below command.









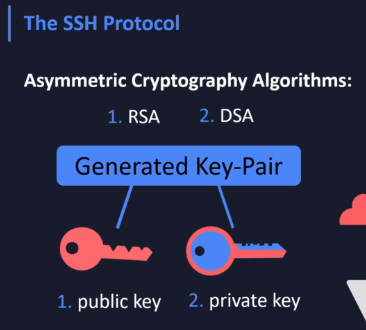


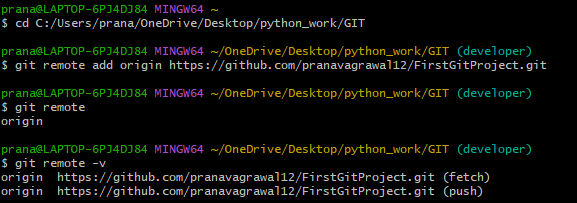
**SSH(Secure Shell)** is access credential that is used in the SSH Protocol. In other words, it is a [cryptographic](https://www.geeksforgeeks.org/cryptography-and-its-types/) network protocol that is used for transferring encrypted data over network. It allows you to connect to a server, or multiple servers, without having you to remember or enter your password for each system that is to login remotely from one system into another.  
It always comes in key pair:

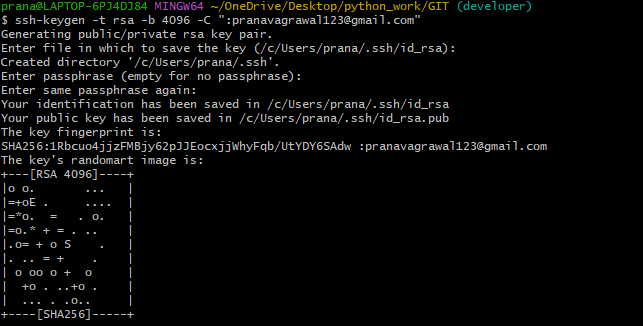
1. **Public key –** Everyone can see it, no need to protect it. (for encryption function)
2. **Private key –** Stays in computer, must be protected. (for decryption function)

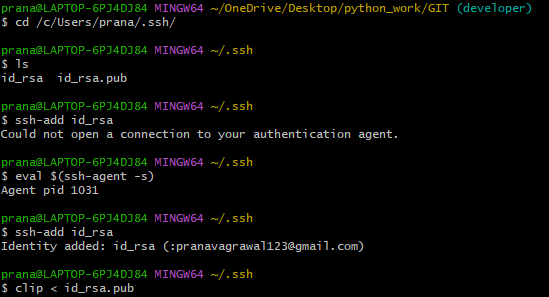
**SSH** is a software package that enables secure system administration and file transfers over insecure networks.

SSH, also known as Secure Shell or Secure Socket Shell, is a network protocol that gives users, particularly system administrators, a secure way to access a computer over an unsecured network. SSH also refers to the suite of utilities that implement the SSH protocol.



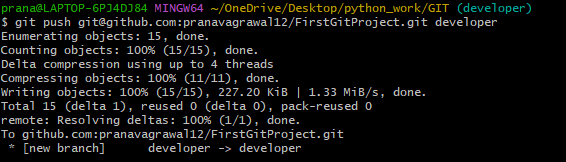






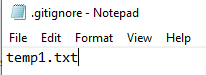


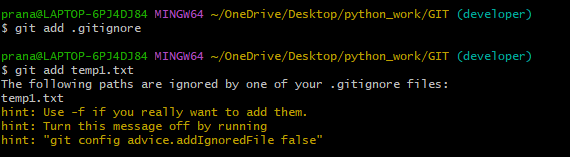


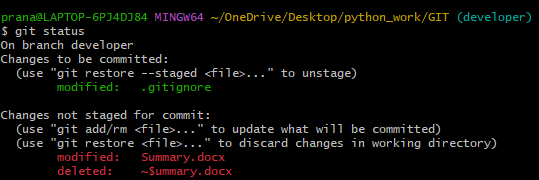












A fork is a new repository that shares code and visibility settings with the original “upstream” repository. Forks are often used to iterate on ideas or changes before they are proposed back to the upstream repository, such as in open-source projects or when a user does not have write access to the upstream repository.

A pull request is a proposal to merge a set of changes from one branch into another. In a pull request, collaborators can review and discuss the proposed set of changes before they integrate the changes into the main codebase. Pull requests display the differences, or diffs, between the content in the source branch and the content in the target branch.

You can fork a project (copy from GITHUB repository to your own repository) and then make changes and then click on pull request. Owner of original repository will get a notification to approve and merge the changes.

Forking may not always be very efficient. Another way is cloning after forking to our GIT HUB account. For cloning copy the code url.

