Project Day-1

Date:21-02-2023

- **Without Version Control System**

  → No collaboration between the team.
  → Once saved all changes are permanent.
  → Since there is no backup maintained.

- **All these problems can be solved with the help of Version Control System.**
  - Best Version Control Systems are : GitHub,GitLab,etc.

WorkFlow oF Git

1. **Remote Repository:** All the changes that Collaborators make just uploaded to Remote repository.
2. **Local Repository:** Users access all the files to the local Repository and then make changes. Once they have a set of changes, push changes to the remote repository.
3. **Working Copy:** it is a User Active Directory,the user modifies the existing file and creates the new file.
4. **Staging Area:** All the modified files commit a place.Once you make a changes then commit the changes before committing you just put them into a staging area.it is a place between working copy and remote repository.

The Commands that perform these Actions

CLONE: create copy of existing remote repository inside the local repository.
COMMIT: commits all the files in the staging area to the local repository.
PUSH: pushes all the changes made in the local repository to the remote repository.
FETCH: collects the changes made in the remote repository and copies them to the local Repository.
PULL: Similar to fetch.

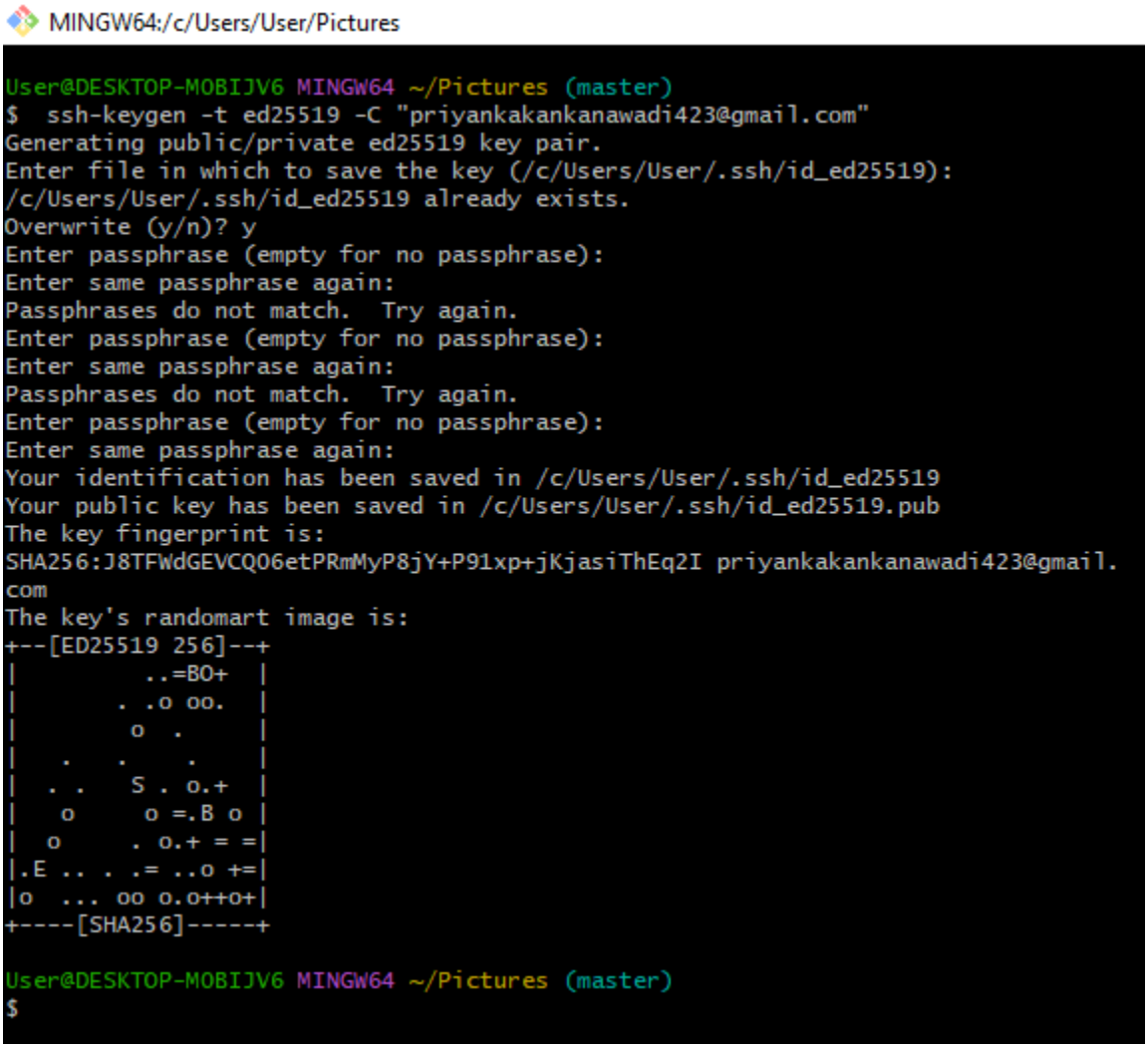
Need to Generate SSH Key

You Can connect github without using supplying username and personal access Token at each visit.

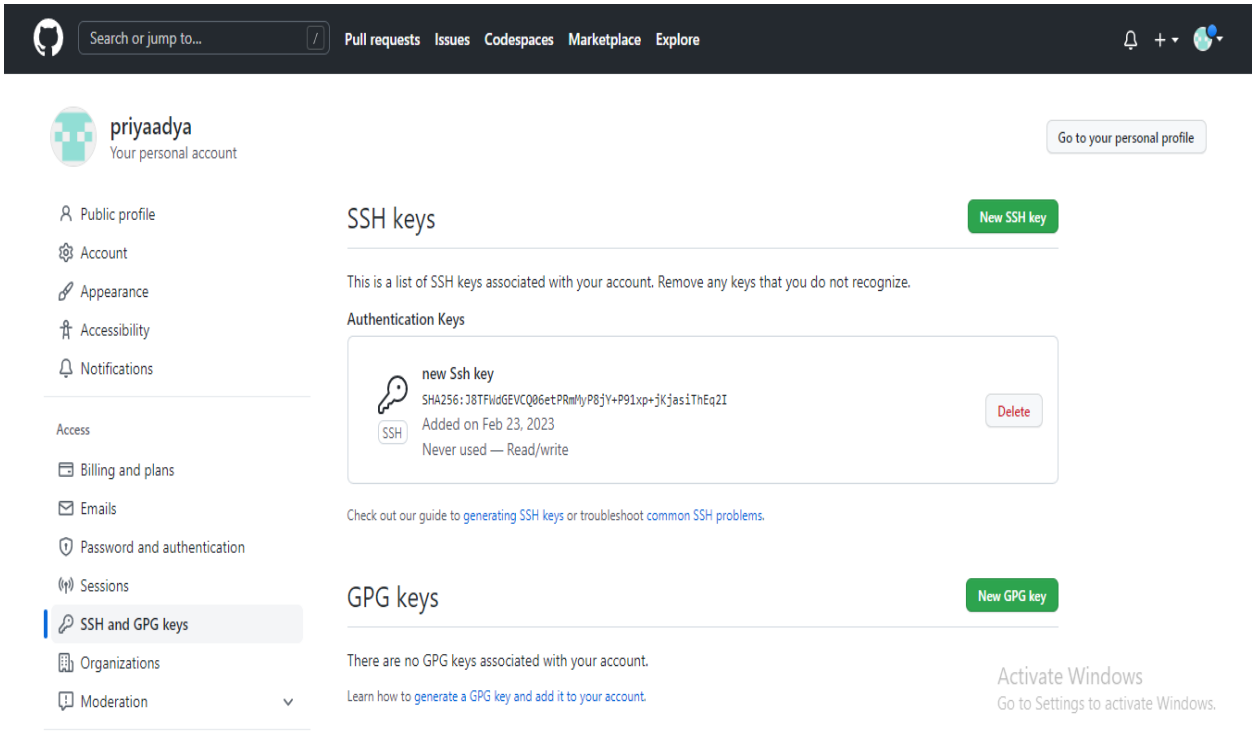
Project Day-2 **Date:22-2-2023**

Steps to be followed:

- ➔ Go to github account
- ➔ select settings
- ➔ Select ssh key and GPG keys
- ➔ Next select new ssh key
- ➔ Search in google Generating ssh key
- ➔ `$ ssh-keygen -t ed25519 -C "your_email@example.com" take this text`
- ➔ Open git bash at anywhere
- ➔ Paste that text you copied
- ➔ Then enter enter
- ➔ One key will be generated and it showing one location



- ➔ Go to the specified location and copy that generated key
- ➔ Go to github select new ssh key
- ➔ Title : anything you want Key: paste that copied key
- ➔ Click on add SSH key
- ➔ Confirm git access password



Cloning from remote to local repository using ssh key

- ➔ Go to github account from which repository you want take that one copy ssh key from code
- ➔ Git Bash anywhere you want
- ➔ Use clone and paste that copied code

- ➔ After cloning you will get a remote repository in your local repository .If you want to add any new file from the local repository create a new file and git bash from where the file is located.
- ➔ Check git status
- ➔ Git add -A for adding files
- ➔ Git commit -m “message”
- ➔ Git push -u origin master