

```
MINGW64:/e/ACTIVITIES/Git
Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git
$ git config --global user.name "Umang Jayswal"

Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git
$ git config --global user.email "umangaj2410@gmail.com"

Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git
$
```

The image shows a Windows 10 taskbar at the bottom of the screen. From left to right, the icons are: a weather widget showing '30°C Smoke', the Start button, a search bar, a pinned Microsoft To Do tile, a pinned File Explorer tile, a pinned Settings gear icon, a pinned Google Chrome browser icon, a pinned Microsoft Edge browser icon, a pinned Microsoft Paint icon, a pinned Microsoft Word document icon, and a pinned Microsoft Visual Studio Code icon. On the far right of the taskbar, there is a system tray with icons for battery level (partially charged), signal strength (Wi-Fi), volume (muted), and a small circular status indicator.

```
MINGW64:/e/ACTIVITIES/Git
Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git
$ git config --global user.name "Umang Jayswal"

Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git
$ git config --global user.email "umangaj2410@gmail.com"

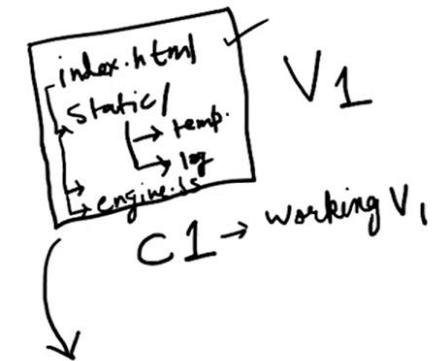
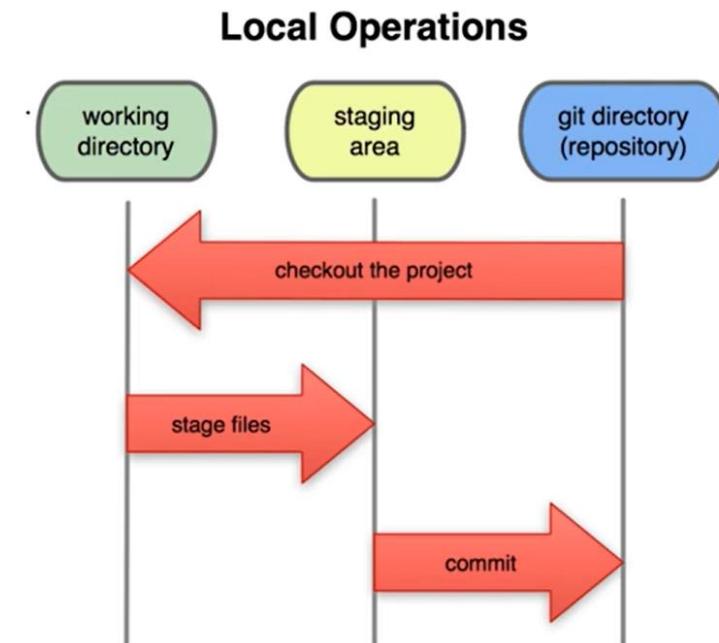
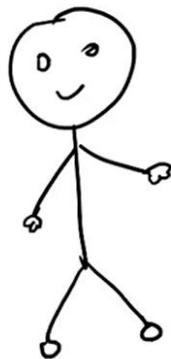
Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git
$ git config user.name
Umang Jayswal

Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git
$ git config user.email
umangaj2410@gmail.com

Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git
$
```

The image shows a Windows taskbar at the bottom of the screen. From left to right, it includes: a weather icon for '30°C Smoke', a Start button, a search bar, pinned application icons for File Explorer, Microsoft Edge, and others, and system status icons for battery level, network connection, volume, and date/time (12:58 PM, 16-03-2023).

Git – Three stage architecture



- **git status** :- This command lists all the files that have to be committed.

```
Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git
$ git status
fatal: not a git repository (or any of the parent directories): .git

Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git
$
```

- **git init** :- This command is used to start a new repository.

```
Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git
$ git init
Initialized empty Git repository in E:/ACTIVITIES/Git/.git/

Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git (master)
$
```

```
MINGW64:/e/ACTIVITIES/Git
Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git
$ git status
fatal: not a git repository (or any of the parent directories): .git

Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git
$ git init
Initialized empty Git repository in E:/ACTIVITIES/Git/.git/

Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    First Git repo/
    Git & GitHub.docx
    ~$t & GitHub.docx
    ~WRL1735.tmp

nothing added to commit but untracked files present (use "git add" to track)

Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git (master)
$ |
```



Search



ENG

IN



01:24 PM

16-03-2023

- **Git add :- This command adds a file to the staging area.**

```
Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git/GitHub (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    asdasd.txt

nothing added to commit but untracked files present (use "git add" to track)

Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git/GitHub (master)
$ git add --a

Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git/GitHub (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   asdasd.txt
```

- **Git commit :-** This command records or snapshots the file permanently in the version history.

```
Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git/GitHub (master)
$ git commit -m "First commit"
[master (root-commit) b3666b6] First commit
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 asdasd.txt
```

```
Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git/GitHub (master)
$ git status
on branch master
nothing to commit, working tree clean
```

- **Git log :-** This command is used to list the version history for the current branch.

```
Umang Jayswal@Umang-AJ MINGW64 /e/ACTIVITIES/Git/GitHub (master)
$ git log
commit b3666b641d52d938e5c155d559c48dd7014c691f (HEAD -> master)
Author: Umang Jayswal <umangaj2410@gmail.com>
Date:   Thu Mar 16 13:35:55 2023 +0530

    First commit
```

- **Git clone :-** This command is used to obtain a repository from an existing URL.
- Add GitHub url and download repository

```
Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials
$ git clone https://github.com/tensorflow/tensorflow.git
```

```
Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials
$ git clone https://github.com/tensorflow/tensorflow.git
Cloning into 'tensorflow'...
remote: Enumerating objects: 35, done.
remote: Counting objects: 100% (35/35), done.
remote: Compressing objects: 100% (29/29), done.
remote: Total 744574 (delta 11), reused 24 (delta 6), pack-reused 744539
Receiving objects: 100% (744574/744574), 417.10 MiB | 7.87 MiB/s, done.
Resolving deltas: 100% (601575/601575), done.
Updating files: 100% (18877/18877), done.
```

- Must Remember :-

```
Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials
$ pwd
/c/Users/Haris/Desktop/code playground/Tuts/Git tutorials

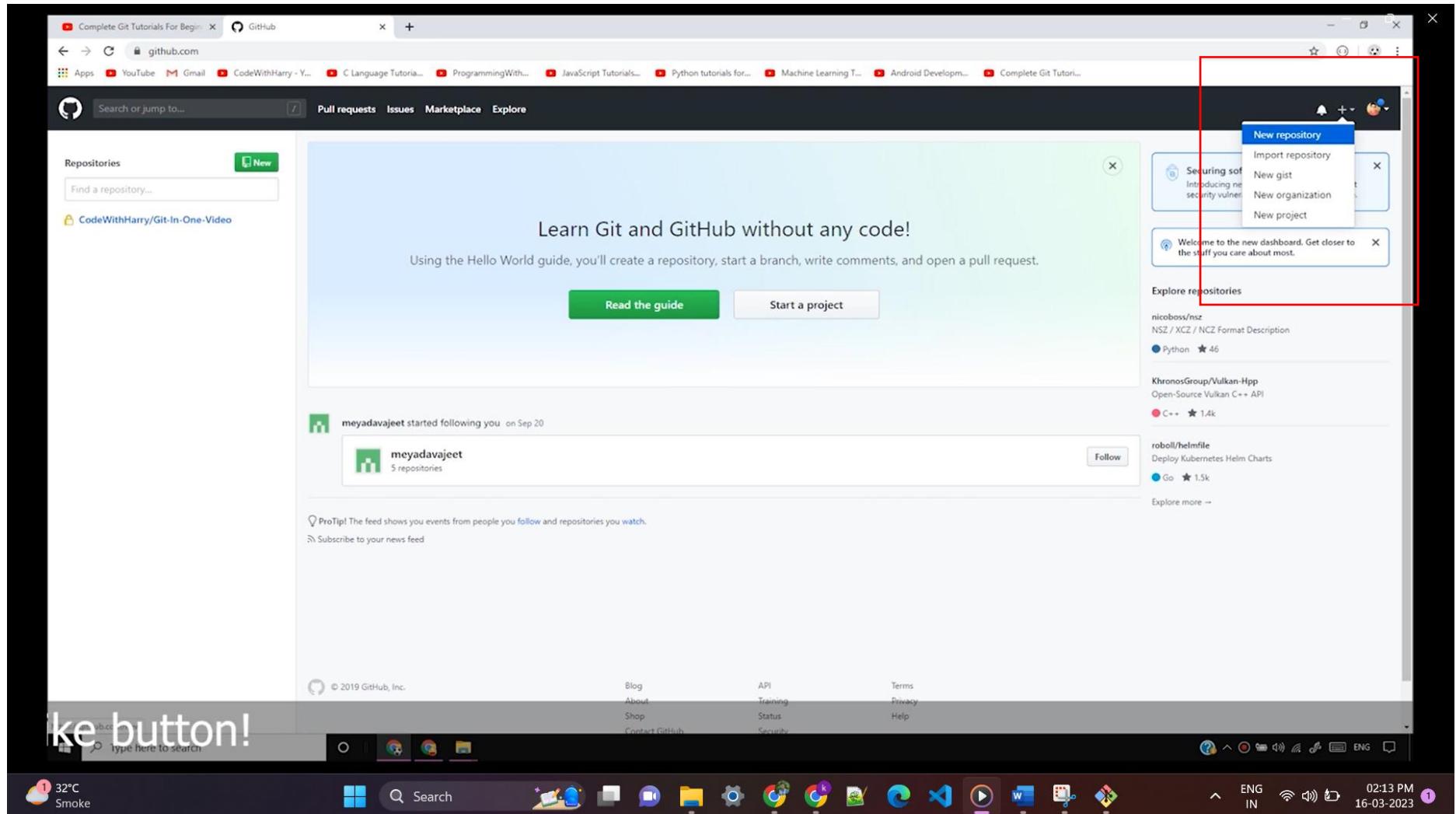
Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials
$ ls
db.accdb  first.txt  myexcel.xlsx  tensorflow/

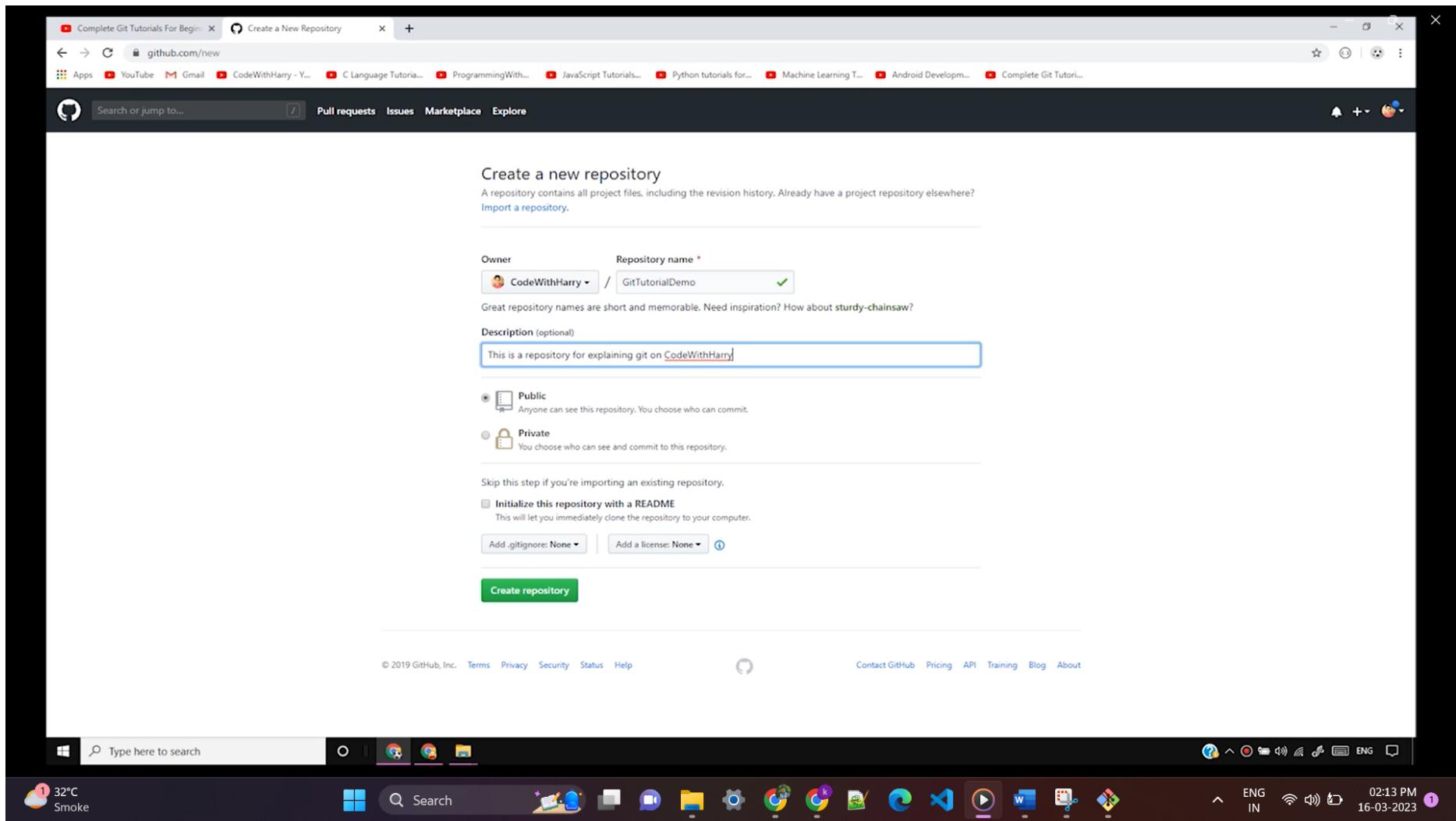
Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials
$ cd tensorflow/

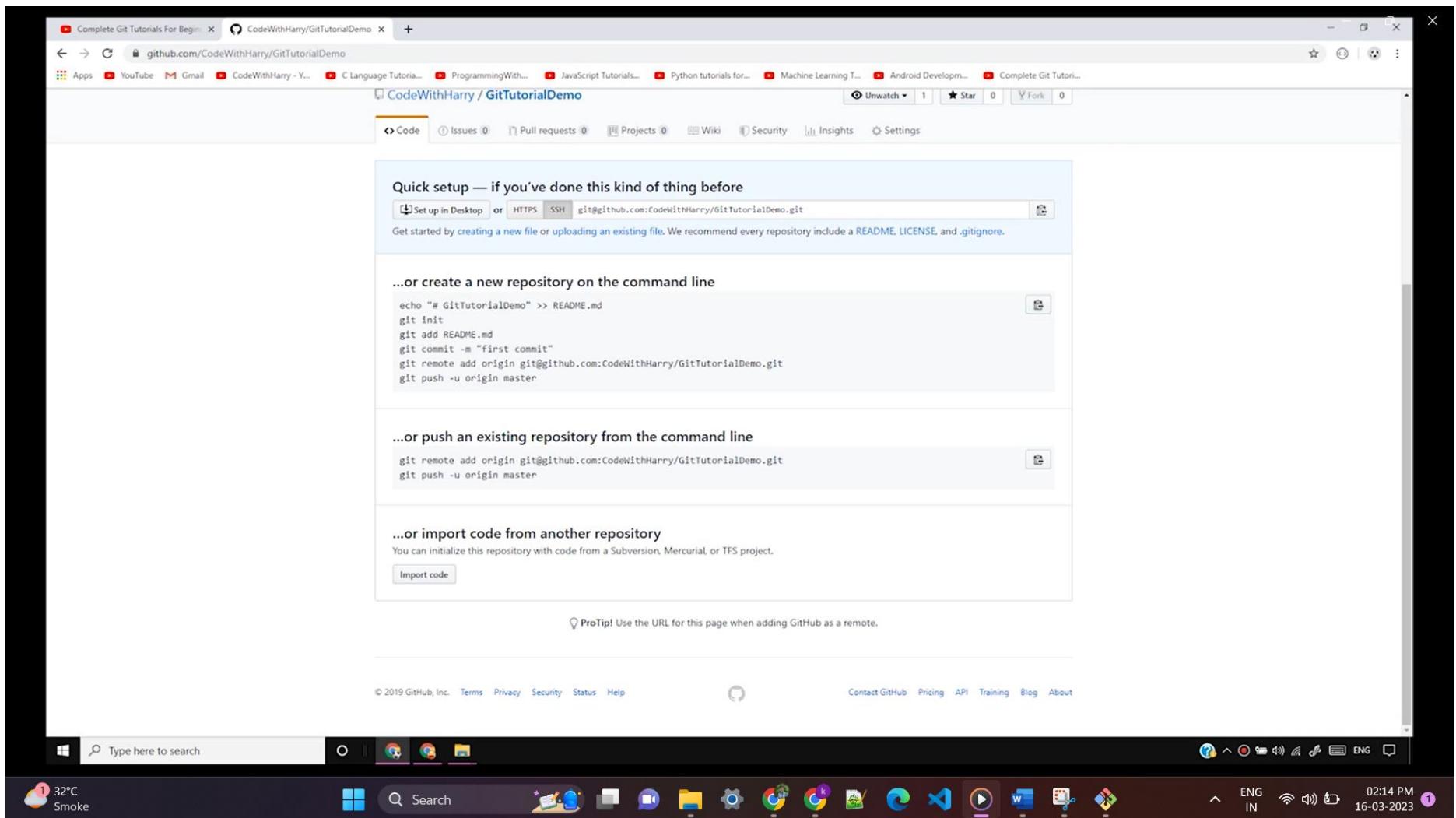
Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials/tensorflow (master)
$ pwd
/c/Users/Haris/Desktop/code playground/Tuts/Git tutorials/tensorflow

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials/tensorflow (master)
$ ls
ACKNOWLEDGMENTS      BUILD           configure.cmd    ISSUES.md      RELEASE.md      tools/
ADOPTERS.md          CODE_OF_CONDUCT.md  configure.py     LICENSE        SECURITY.md    WORKSPACE
arm_compiler.BUILD   CODEOWNERS       CONTRIBUTING.md  models.BUILD  tensorflow/
AUTHORS              configure*        ISSUE_TEMPLATE.md README.md    tensorflow/
                                         
```

- GitHub :-







```
MINGW64:/c/Users/Haris/Desktop/code playground/Tuts/Git tutorials
Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git status
On branch master
nothing to commit, working tree clean

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git remote

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$
```

The image shows a Windows 10 taskbar at the bottom of the screen. On the left, there's a search bar with the placeholder "Type here to search". To its right are several pinned icons: File Explorer, Edge browser, File Explorer again, Task View, Settings, Google Chrome, Microsoft Edge, File Explorer, and Visual Studio Code. In the center, there's a large, semi-transparent window for a terminal session. On the right side of the taskbar, there are system status icons for battery level (32°C), network, volume, and a clock showing "02:19 PM" and the date "16-03-2023". A small notification badge with the number "1" is also visible.

```
MINGW64:/c/Users/Haris/Desktop/code playground/Tuts/Git tutorials
Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git status
On branch master
nothing to commit, working tree clean

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git remote

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ ^C

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git remote add origin git@github.com:CodewithHarry/GitTutorialDemo.git
```

```
MINGW64:/c/Users/Haris/Desktop/code playground/Tuts/Git tutorials
Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git status
On branch master
nothing to commit, working tree clean

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git remote

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ ^C

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git remote add origin git@github.com:CodewithHarry/GitTutorialDemo.git

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git remote
origin

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$
```

```
MINGW64:/c/Users/Haris/Desktop/code playground/Tuts/Git tutorials
Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git status
On branch master
nothing to commit, working tree clean

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git remote

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ ^C

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git remote add origin git@github.com:CodewithHarry/GitTutorialDemo.git

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git remote
origin

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git remote -v
origin  git@github.com:CodewithHarry/GitTutorialDemo.git (fetch)
origin  git@github.com:CodewithHarry/GitTutorialDemo.git (push)

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ |
```

- We don't have permission to push so we added the SSH key.

```
MINGW64:c/Users/Haris/Desktop/code playground/Tuts/Git tutorials
Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git remote
Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ ^C

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git remote add origin git@github.com:CodewithHarry/GitTutorialDemo.git
Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git remote
origin

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git remote -v
origin  git@github.com:CodewithHarry/GitTutorialDemo.git (fetch)
origin  git@github.com:CodewithHarry/GitTutorialDemo.git (push)

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git push -u origin master
ERROR: Permission to CodewithHarry/GitTutorialDemo.git denied to haris989.
fatal: Could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists.

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$
```

A screenshot of a Microsoft Edge browser window displaying the GitHub 'SSH and GPG keys' settings page. The URL in the address bar is `github.com/settings/keys`. The page shows a sidebar with navigation links like Personal settings, Profile, Account, Security, Emails, Notifications, Billing, SSH and GPG keys (which is highlighted), Blocked users, Repositories, Organizations, Saved replies, Applications, and Developer settings. The main content area is titled 'SSH keys' and contains a list of one key: 'Harry's Personal Computer'. This key has a hex fingerprint of `8f:8a:18:46:b1:c6:d9:34:7d:76:a1:ca:af:87:de:65`, was added on Mar 19, 2019, and was last used within the last 8 months with Read/write permissions. A 'Delete' button is visible next to the key entry. Below this section is a note about generating and troubleshooting SSH keys. The 'GPG keys' section shows no keys associated with the account. At the bottom, there are copyright notices for GitHub, Inc., and links to Contact GitHub, Pricing, API, Training, Blog, and About.

SSH and GPG keys

SSH keys

This is a list of SSH keys associated with your account. Remove any keys that you do not recognize.

Harry's Personal Computer

8f:8a:18:46:b1:c6:d9:34:7d:76:a1:ca:af:87:de:65

Added on Mar 19, 2019

Last used within the last 8 months — Read/write

Check out our guide to [generating SSH keys](#) or [troubleshoot common SSH Problems](#).

GPG keys

New GPG key

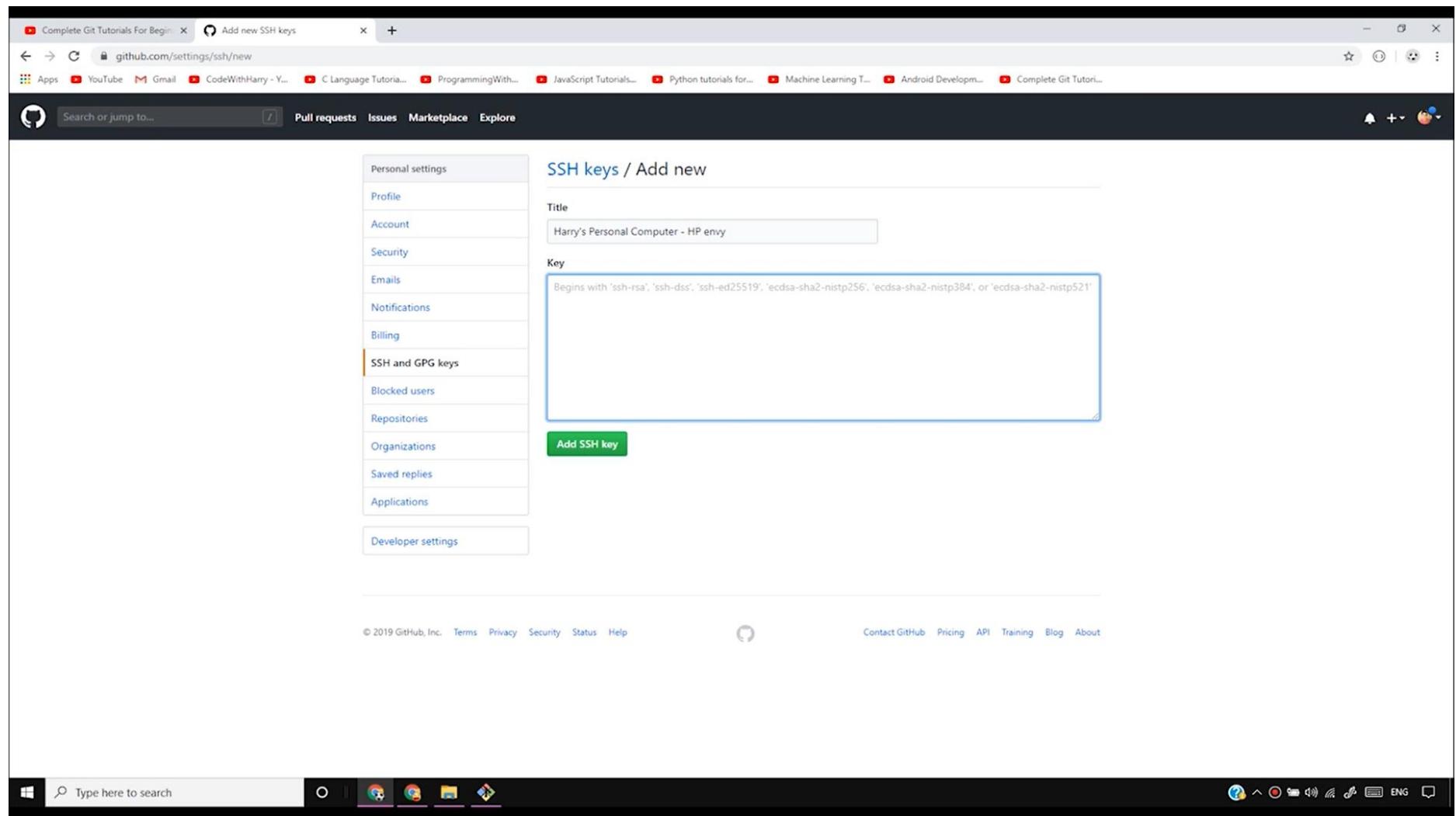
There are no GPG keys associated with your account.

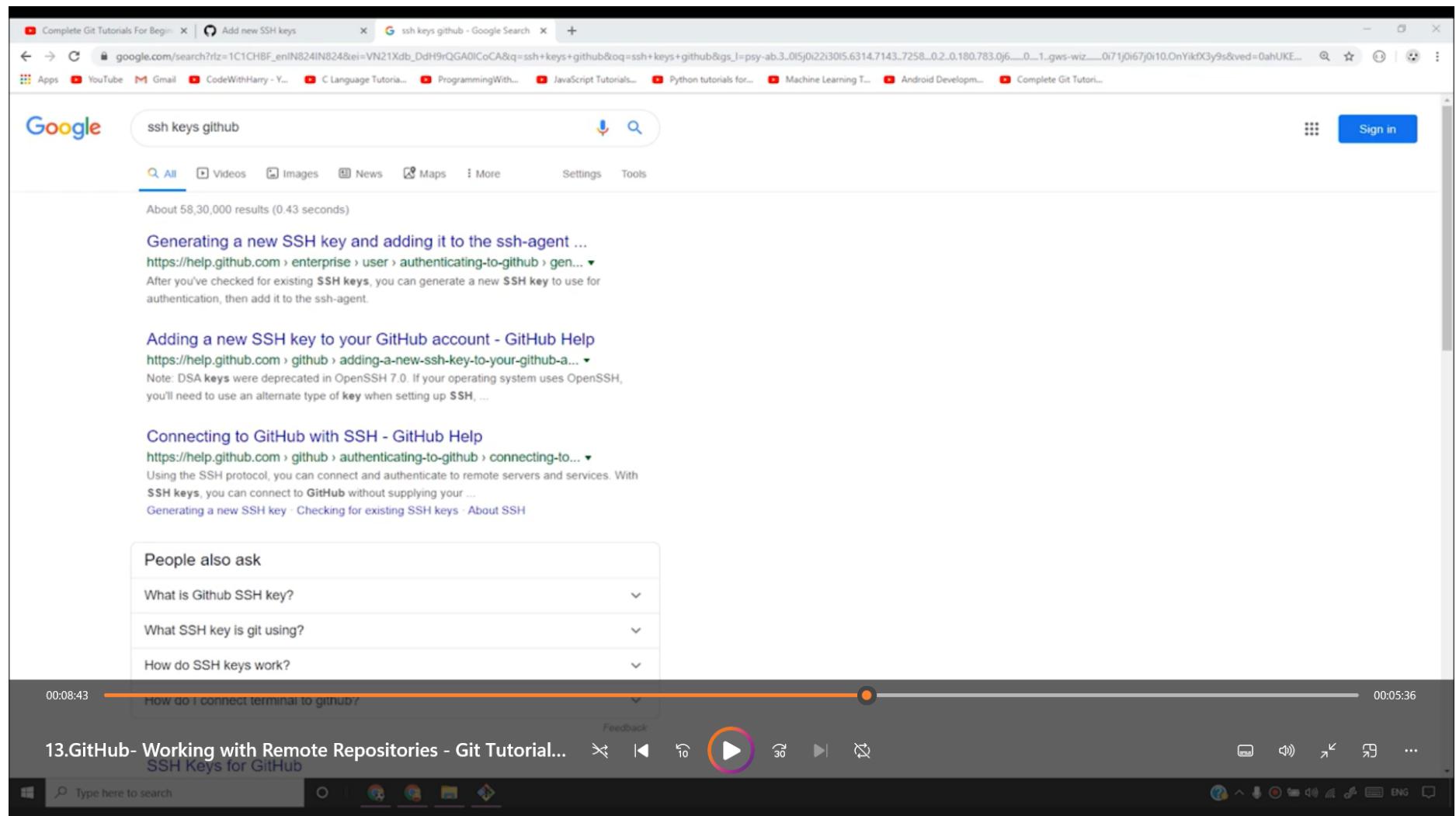
Learn how to [generate a GPG key](#) and add it to your account.

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Contact GitHub Pricing API Training Blog About

Type here to search





```
MINGW64:/c/Users/Haris/Desktop/code playground/Tuts/Git tutorials
Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git push -u origin master
ERROR: Permission to CodewithHarry/GitTutorialDemo.git denied to haris989.
fatal: Could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists.

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ ssh-keygen -t rsa -b 4096 -C "harry@codewithharry.com"
Generating public/private rsa key pair.
Enter file in which to save the key (/c/Users/Haris/.ssh/id_rsa):
/c/Users/Haris/.ssh/id_rsa already exists.
Overwrite (y/n)? y
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Saving key "/c/Users/Haris/.ssh/id_rsa" failed: Permission denied

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ eval $(ssh-agent -s)
Agent pid 1688

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ ssh-add ~/.ssh/id_rsa
Identity added: /c/Users/Haris/.ssh/id_rsa (Haris@DESKTOP-RN53EBB)

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ tail ~/.ssh/id_rsa.pub
```

- **SSH Key**

```
MINGW64/c/Users/Haris/Desktop/code playground/Tuts/Git tutorials
Saving key "/c/Users/Haris/.ssh/id_rsa" failed: Permission denied

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ eval $(ssh-agent -s)
Agent pid 1688

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ ssh-add ~/.ssh/id_rsa
Identity added: /c/Users/Haris/.ssh/id_rsa (Haris@DESKTOP-RN53EBB)

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ tail ~/.ssh/id_rsa.pub
ssh-rsa AAAAB3NzaC1yc2EAAAQABAAQDUAvegEIpAVJ0ibZYp447txHGFAJNe5xUH2TP+oFrTl+DIUNIUH9xz0zJ
+2HmdsnGe2CQxHhs1wObssvcu7ZXS/sDM1XJp5hxsmVekL8Me807SC8c47UeMyFMhLqYBwZVVDMAe1qi92hgJFp1g0Lctuj
GcBt4SoGj1j24T7mFDsqZiQHHDD4gy0bATq5RoGGN7XCQvn51sXpCgUxadwUw56PqcaF8IpIObFWI1b4gS7tEpg2/uKYJYS
fDpMRFw/a34Q8GjDpAKHosNiXSxt7+IRaScXunxQGyFCa1ZIQePKA8em3UbcR7SQ8Mo4FnhihpnzEVrUp3Tyr19Cj0ysDr1
Haris@DESKTOP-RN53EBB

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ ^C

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ ^C

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ ^C

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ ssh-keygen -t rsa -b 4096 -C "harry@codewithharry.com"
```

```
MINGW64:/c/Users/Haris/Desktop/code playground/Tuts/Git tutorials
+2HmdsnGe2CQxHhs1wobssvcu7ZXs/sDMlXJp5hxsmVekL8Me807SC8c47UeMyFMhLqYBwZVVDMAe1qi92hgJFp1g0Lctuj
GcBt4SoGj1j24T7mFDsqZiQHHDD4gy0bATq5RoGGN7XCQvn51sXpCgUxadwUw56PqcaF8IpIObFWI1b4gs7tEpg2/uKYJYS
fDpMRfw/a34Q8GjDpAKHosNiXSxt7+IRaScXunxQGyFCa1ZIQePKA8em3UbcR7SQ8Mo4FnhihpnzEVrUp3Tyrl9Cj0ysDr1
Haris@DESKTOP-RN53EBB

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ ^C

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ ^C

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ ^C

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git push -u origin master
Enumerating objects: 11, done.
Counting objects: 100% (11/11), done.
Delta compression using up to 4 threads
Compressing objects: 100% (7/7), done.
Writing objects: 100% (11/11), 26.22 KiB | 536.00 KiB/s, done.
Total 11 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), done.
To github.com:CodewithHarry/GitTutorialDemo.git
 * [new branch]      master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$
```

- If we have made some changes in the repository.

```
MINGW64:c/Users/Haris/Desktop/code playground/Tuts/Git tutorials
$ git status
On branch master
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    this.txt

nothing added to commit but untracked files present (use "git add" to track)

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git add .

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git commit -m "Added this.txt github"
[master 3bbbf425] Added this.txt github
 1 file changed, 1 insertion(+)
 create mode 100644 this.txt

Haris@DESKTOP-RN53EBB MINGW64 ~/Desktop/code playground/Tuts/Git tutorials (master)
$ git push -u origin master
```

```
MINGW64:/d/Business/code playground/Tuts/Git tutorials
Haris@DESKTOP-RN53EBB MINGW64 /d/Business/code playground/Tuts/Git tutorials (master)
$ git remote

Haris@DESKTOP-RN53EBB MINGW64 /d/Business/code playground/Tuts/Git tutorials (master)
$ git remote -v

Haris@DESKTOP-RN53EBB MINGW64 /d/Business/code playground/Tuts/Git tutorials (master)
$ git remote add origin https://github.com/CodewithHarry/DemoRepository.git

Haris@DESKTOP-RN53EBB MINGW64 /d/Business/code playground/Tuts/Git tutorials (master)
$ git remote
origin

Haris@DESKTOP-RN53EBB MINGW64 /d/Business/code playground/Tuts/Git tutorials (master)
$ git remote -v
origin https://github.com/CodewithHarry/DemoRepository.git (fetch)
origin https://github.com/CodewithHarry/DemoRepository.git (push)

Haris@DESKTOP-RN53EBB MINGW64 /d/Business/code playground/Tuts/Git tutorials (master)
$ w
bash: w: command not found

Haris@DESKTOP-RN53EBB MINGW64 /d/Business/code playground/Tuts/Git tutorials (master)
$ git push -u origin master
```

