Open git bash

git init

git remote add origin “https://github.com/saheb2712/git-github.git”

git pull origin master

git status

git add file1.txt

git status

git commit –m “adding files”

==to add multiple files/folder==

Create the files

Then run,

git add -A --->it will add all the files at one shot

git commit -a -m “added 3 files together”

=======How git stores commit=======

SHA1 40 digit hexadecimal code, date , who has commited

**$ git log**

commit 70893be09b91f2978a30d8b84823e202c2a3a333

Author: Saheb <saheb2712@gmail.com>

Date: Thu Mar 9 01:49:49 2017 +0530

adding file1

commit 4703764964d5f59cc07f250a62789e58c9f8915e

Author: saheb2712 <saheb2712@gmail.com>

Date: Thu Mar 9 01:19:10 2017 +0530

Initial commit

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$

BRANCHING

Branches are pointers to specific commit

Branches are of two types:

* Local Branches
* Remote tracking branches

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ pwd

/g/Sourav\_Projects

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git branch firstbranch --->Creating new branch

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git checkout firstbranch ---->switch to particular branch(here “firstbranch” is new branch)

Switched to branch 'firstbranch'

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git add test.txt -----> Since it is windows its not working, So creating using GUI

fatal: pathspec 'test.txt' did not match any files

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git status

On branch firstbranch

Untracked files:

(use "git add <file>..." to include in what will be committed)

file2.txt

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

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git add file2.txt

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ ls -ltr

total 1

-rw-r--r-- 1 sourav 197121 12 Mar 9 01:31 README.md

-rw-r--r-- 1 sourav 197121 0 Mar 9 01:37 file1.txt

-rw-r--r-- 1 sourav 197121 0 Mar 9 19:19 file2.txt

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git commit -m "made changes from firstbranch"

[firstbranch 2733a6f] made changes from firstbranch

1 file changed, 0 insertions(+), 0 deletions(-)

create mode 100644 file2.txt

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ ls -ltr

total 1

-rw-r--r-- 1 sourav 197121 12 Mar 9 01:31 README.md

-rw-r--r-- 1 sourav 197121 0 Mar 9 01:37 file1.txt

-rw-r--r-- 1 sourav 197121 0 Mar 9 19:19 file2.txt

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git checkout master

Switched to branch 'master'

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ ls -ltr

total 1

-rw-r--r-- 1 sourav 197121 12 Mar 9 01:31 README.md

-rw-r--r-- 1 sourav 197121 0 Mar 9 01:37 file1.txt

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git status

On branch master

nothing to commit, working tree clean

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git merge firstbranch

Updating 70893be..2733a6f

Fast-forward

file2.txt | 0

1 file changed, 0 insertions(+), 0 deletions(-)

create mode 100644 file2.txt

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ ls -ltr

total 1

-rw-r--r-- 1 sourav 197121 12 Mar 9 01:31 README.md

-rw-r--r-- 1 sourav 197121 0 Mar 9 01:37 file1.txt

-rw-r--r-- 1 sourav 197121 0 Mar 9 19:26 file2.txt

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ vi file1.txt

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git checkout firstbranch

Switched to branch 'firstbranch'

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ vi file2.txt

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ cat file2.txt

ffgfggchcchgxgxg

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git status

On branch firstbranch

Changes not staged for commit:

(use "git add <file>..." to update what will be committed)

(use "git checkout -- <file>..." to discard changes in working directory)

modified: file2.txt

no changes added to commit (use "git add" and/or "git commit -a")

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git commit -a -m "modifying file2"

warning: LF will be replaced by CRLF in file2.txt.

The file will have its original line endings in your working directory.

[firstbranch b7b7d9d] modifying file2

1 file changed, 2 insertions(+)

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ cat file2.txt

ffgfggchcchgxgxg

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git checkout master

Switched to branch 'master'

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ cat file2.txt

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git merge firstbranch

Updating 2733a6f..b7b7d9d

Fast-forward

file2.txt | 2 ++

1 file changed, 2 insertions(+)

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ cat file2.txt

ffgfggchcchgxgxg

**Rebase: Another Way of combining the work b/w two branch**

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git checkout firstbranch

Switched to branch 'firstbranch'

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git add file3.txt

fatal: pathspec 'file3.txt' did not match any files

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ pwd

/g/Sourav\_Projects

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git add file3.txt

fatal: pathspec 'file3.txt' did not match any files

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git status

On branch firstbranch

Untracked files:

(use "git add <file>..." to include in what will be committed)

file3.txt

file4.txt

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

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git add -A

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git commit -a -m "adding for rebasing"

[firstbranch 0205de7] adding for rebasing

2 files changed, 2 insertions(+)

create mode 100644 file3.txt

create mode 100644 file4.txt

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ ls

file1.txt file2.txt file3.txt file4.txt README.md

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git checkout master

Switched to branch 'master'

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ ls

file1.txt file2.txt README.md

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git rebase firstbranch

First, rewinding head to replay your work on top of it...

Fast-forwarded master to firstbranch.

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ ls

file1.txt file2.txt file3.txt file4.txt README.md

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ cat file3.txt

test file3

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git checkout firstbranch

Switched to branch 'firstbranch'

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ ls

file1.txt file2.txt file3.txt file4.txt README.md

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git rebase master

Current branch firstbranch is up to date.

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$

How to push into the central repository

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ ssh-keygen

Generating public/private rsa key pair.

Enter file in which to save the key (/c/Users/sourav/.ssh/id\_rsa):

Created directory '/c/Users/sourav/.ssh'.

Enter passphrase (empty for no passphrase):

Enter same passphrase again:

Your identification has been saved in /c/Users/sourav/.ssh/id\_rsa.

Your public key has been saved in /c/Users/sourav/.ssh/id\_rsa.pub.

The key fingerprint is:

SHA256:Ca9omUqeMOGrCcLpO/m5uNZee/7fAqgGLgDuWfSBTug sourav@sourav-PC

The key's randomart image is:

+---[RSA 2048]----+

| |

| |

| . . . |

|.. + . o . |

|= + . . S |

|+E.+ = o . |

|B+B \*.o . |

|+&o\*oo.. .. |

|=\*@=o.o....... |

+----[SHA256]-----+

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ cat /c/Users/sourav/.ssh/id\_rsa.pub

ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQCkMa03YRur21nldnDTRlqOlRuPycRQ0coDEUtBTSj+M8jFtPVV/KAaVLBfEsKmtTiWk6b4CdkzNkeURw4fgQuJ6lh/IA20gbeEwyvN66PsJaMeV9JvbMaJ8Z7BF844vcQ+ZSZY5iOQTyGQ/kvbZ2oG4Ea08mKydWgzdy30Ltk+4do8dVrav@sourav-PC

COPY THE ABOVE KEY INTO YOUR GITHUB SSH KEY

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ ssh -T git@github.com

The authenticity of host 'github.com (192.30.253.113)' can't be established.

RSA key fingerprint is SHA256:nThbg6kXUpJWGl7E1IGOCspRomTxdCARLviKw6E5SY8.

Are you sure you want to continue connecting (yes/no)? yes

Warning: Permanently added 'github.com,192.30.253.113' (RSA) to the list of known hosts.

Hi saheb2712! You've successfully authenticated, but GitHub does not provide shell access.

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git checkout firstbranch

Switched to branch 'firstbranch'

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git push origin firstbranch

Username for 'https://github.com': saheb

remote: Invalid username or password.

fatal: Authentication failed for 'https://github.com/saheb2712/git-github.git/'

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git push origin firstbranch

Username for 'https://github.com':

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git push origin firstbranch

Username for 'https://github.com': saheb2712

Counting objects: 12, done.

Delta compression using up to 4 threads.

Compressing objects: 100% (8/8), done.

Writing objects: 100% (12/12), 927 bytes | 0 bytes/s, done.

Total 12 (delta 3), reused 0 (delta 0)

remote: Resolving deltas: 100% (3/3), done.

To https://github.com/saheb2712/git-github.git

\* [new branch] firstbranch -> firstbranch

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git checkout master

Switched to branch 'master'

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git push origin master

Username for 'https://github.com': saheb2712

Total 0 (delta 0), reused 0 (delta 0)

To https://github.com/saheb2712/git-github.git

4703764..0205de7 master -> master

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

**REVERT to previous version**

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git status

On branch master

Untracked files:

(use "git add <file>..." to include in what will be committed)

revert.txt

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

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git add revert.txt

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git commit -m "adding a file name revert"

[master d372f6e] adding a file name revert

1 file changed, 1 insertion(+)

create mode 100644 revert.txt

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ cat revert.txt

Hello world

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git status

On branch master

Changes not staged for commit:

(use "git add <file>..." to update what will be committed)

(use "git checkout -- <file>..." to discard changes in working directory)

modified: revert.txt

no changes added to commit (use "git add" and/or "git commit -a")

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git commit -m "modify a file name revert"

On branch master

Changes not staged for commit:

modified: revert.txt

no changes added to commit

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git status

On branch master

Changes not staged for commit:

(use "git add <file>..." to update what will be committed)

(use "git checkout -- <file>..." to discard changes in working directory)

modified: revert.txt

no changes added to commit (use "git add" and/or "git commit -a")

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git commit -a -m "modify a file name revert"

[master b7840e1] modify a file name revert

1 file changed, 1 insertion(+), 1 deletion(-)

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ cat revert.txt

Hello world

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git log

commit b7840e1b82b5895f5f39633f73e9b03f23c819fb

Author: Saheb <saheb2712@gmail.com>

Date: Fri Mar 10 00:35:00 2017 +0530

modify a file name revert

commit d372f6ea2d7990765ec7e09c64a119c30065c494

Author: Saheb <saheb2712@gmail.com>

Date: Fri Mar 10 00:31:50 2017 +0530

adding a file name revert

commit 0205de70c5042365ef061aeff03de0a186839f61

Author: Saheb <saheb2712@gmail.com>

Date: Thu Mar 9 20:03:47 2017 +0530

adding for rebasing

commit b7b7d9d72f5232abbc7b483c008924a46d8d2bdd

Author: Saheb <saheb2712@gmail.com>

Date: Thu Mar 9 19:30:58 2017 +0530

modifying file2

commit 2733a6fb98d7865093797a33a5734796c90ddae4

Author: Saheb <saheb2712@gmail.com>

Date: Thu Mar 9 19:21:16 2017 +0530

made changes from firstbranch

commit 70893be09b91f2978a30d8b84823e202c2a3a333

Author: Saheb <saheb2712@gmail.com>

Date: Thu Mar 9 01:49:49 2017 +0530

adding file1

commit 4703764964d5f59cc07f250a62789e58c9f8915e

Author: saheb2712 <saheb2712@gmail.com>

Date: Thu Mar 9 01:19:10 2017 +0530

Initial commit

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git checkout d372f6ea revert.txt

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ git commit -a -m "revert back to previous version"

[master 2ecc5fb] revert back to previous version

1 file changed, 1 insertion(+), 1 deletion(-)

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$ cat revert.txt

Hello

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (master)

$

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git push origin master

Username for 'https://github.com': saheb2712

Counting objects: 3, done.

Delta compression using up to 4 threads.

Compressing objects: 100% (2/2), done.

Writing objects: 100% (3/3), 269 bytes | 0 bytes/s, done.

Total 3 (delta 1), reused 0 (delta 0)

remote: Resolving deltas: 100% (1/1), completed with 1 local objects.

To https://github.com/saheb2712/git-github.git

b7840e1..2ecc5fb master -> master

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ git rebase master

First, rewinding head to replay your work on top of it...

Fast-forwarded firstbranch to master.

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ ls

file1.txt file2.txt file3.txt file4.txt README.md revert.txt

sourav@sourav-PC MINGW64 /g/Sourav\_Projects (firstbranch)

$ ^C













