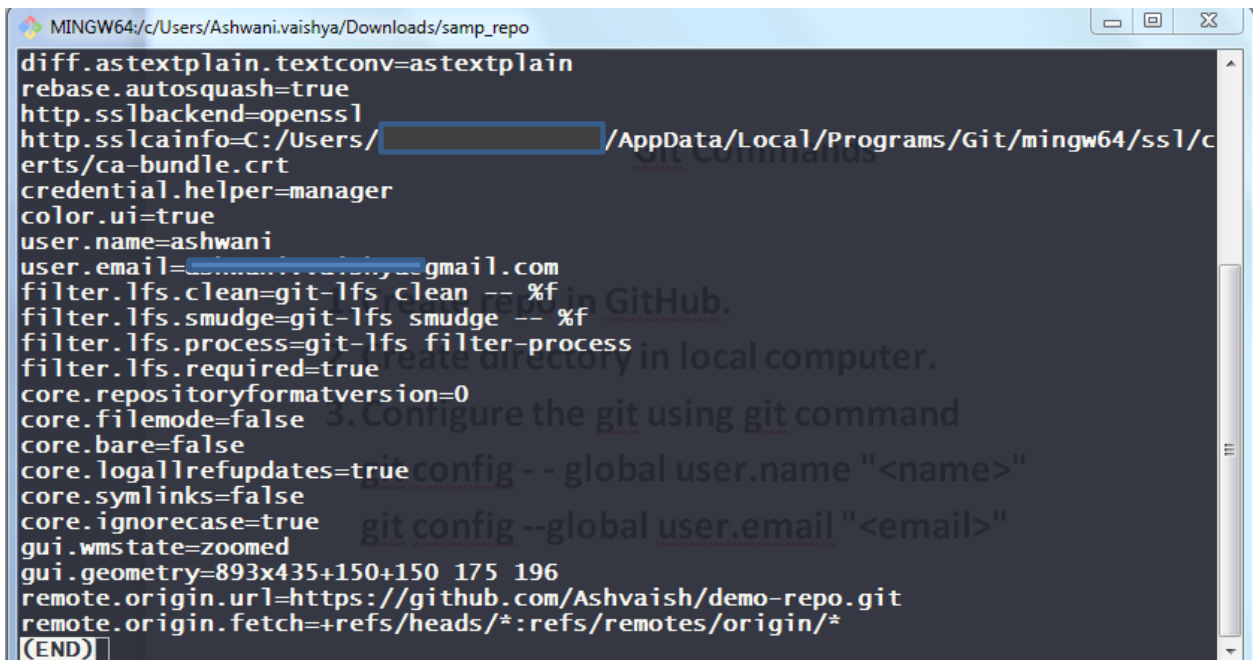


# Git Commands

1. Create repo in GitHub.
2. Create directory in local computer.
3. Configure the git using git command  
**git config - - global user.name "<name>"**  
**git config --global user.email "<email>"**  
**git config --list**



```
diff.astextplain.textconv=astextplain
rebase.autosquash=true
http.sslbackend=openssl
http.sslcainfo=C:/Users/[redacted]/AppData/Local/Programs/Git/mingw64/ssl/certs/ca-bundle.crt
credential.helper=manager
color.ui=true
user.name=ashwani
user.email=ashwani.v@gmail.com
filter.lfs.clean=git-lfs clean -- %f
filter.lfs.smudge=git-lfs smudge -- %f
filter.lfs.process=git-lfs filter-process
filter.lfs.required=true
core.repositoryformatversion=0
core.filemode=false
core.bare=false
core.logallrefupdates=true
core.symlinks=false
core.ignorecase=true
gui.wmstate=zoomed
gui.geometry=893x435+150+150 175 196
remote.origin.url=https://github.com/Ashvaish/demo-repo.git
remote.origin.fetch=+refs/heads/*:refs/remotes/origin/*
(END)
```

4. Initialize git inside directory  
**git init**
5. Add remote origin for the repo which was created in GitHub  
**Git remote add origin <https://github.com/Ashvaish/demo-repo.git>**
6. Pull the master branch from GitHub  
**git pull origin master**

```
MINGW64:/c/Users/Ashwani.vaishya/Downloads/samp_repo
ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (master)
$ git pull origin master
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), done.
From https://github.com/Ashvaish/demo_repo
* branch          master    -> FETCH_HEAD
* [new branch]     master    -> origin/master

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (master)
$
```

7. After adding new file, check the status of the file in git

**git status**

```
ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (master)
$ touch hello.txt

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (master)
$ vim hello.txt

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)

        hello.txt

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

Here it is shown one untracked file, which means the file is not yet added to local repository.

8. To add file in local repository

**git add hello.txt**

```
ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (master)
$ git add hello.txt
warning: LF will be replaced by CRLF in hello.txt.
The file will have its original line endings in your working directory
```

Now the file is added to local repository, but not yet committed. You can still change the content of file.

To check status of added files

**git status**

```

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (master)
$ git status
On branch master
Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

        new file:   hello.txt

```

As can see, file has been added.

9. If you have multiple files to be added to local repository.

**git add -A**

```

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (master)
$ git add -A

```

To check the status of file

**git status**

```

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (master)
$ git status
On branch master
Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

        new file:   hello.txt
        new file:   hello1.txt

```

Now multiple files have been added.

10. To create branch in git

**git branch first**

To check branches

**git branch**

**git branch -a (branch information)**

```

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (master)
$ git branch
* first
  master

```

Now the branch first has been added to branch list

11. To go to one branch to other branch

**git checkout first**

```

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (master)
$ git checkout first
Switched to branch 'first'
A       hello.txt
A       hello1.txt

```

now you will see all the files from master copied to new branch.

To check in which branch you are

## git branch

```
ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (first)
$ git branch
* first
  master
```

Now the branch first has been added to branch list

11. To go to one branch to other branch

git checkout first

a star is shown beside the branch name, which shows the branch you are.

12. To commit files after changes

## git commit -a -m "meaasge"

```
ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (master)
$ git commit -a -m "ver1"
[master feb148d] ver1
2 files changed, 1 insertion(+)
create mode 100644 hello.txt
create mode 100644 hello1.txt
```

now the files are permanently added with some message, until the next change

13. To check logs of git commits

## git log

```
ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (master)
$ git log
commit feb148d81e72adef0d1c0205826067e9a9876844 (HEAD -> master) /samp_repo
Author: ashwani <ashwani.vaishya@gmail.com>
Date:   Fri May 17 14:09:41 2019 +0530

    ver1

commit 3def725a1bba45ad0111d745ae9605ef280b3741 (origin/master, first)
Author: Ashwani <ashwani.vaishya@gmail.com>
Date:   Fri May 17 13:43:04 2019 +0530

    Initial commit
```

it shows the changes made by authors.

14. To integrate changes from one branch to other branch,  
git rebase branchname

```

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (first)
$ git status
On branch first
Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

        new file:   hello3.txt

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (first)
$ git commit -a -m "branch1"
[first c66e2b0] branch1
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 hello3.txt

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (first)
$ git checkout master
Switched to branch 'master'

```

Here after creating new file and committed to local repo in first branch

```

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (master)
$ git rebase first
First, rewinding head to replay your work on top of it...
Applying: ver1

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (master)
$ git status
On branch master
nothing to commit, working tree clean

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (master)
$ ll
total 2
-rw-r--r-- 1 ashwani.vaishya 1049089 16 May 17 14:16 hello.txt
-rw-r--r-- 1 ashwani.vaishya 1049089  0 May 17 14:16 hello1.txt
-rw-r--r-- 1 ashwani.vaishya 1049089  0 May 17 14:16 hello3.txt
-rw-r--r-- 1 ashwani.vaishya 1049089 11 May 17 13:52 README.md

```

Here its shown the file from first branch is integrated with master.

15. Revert back from new changes to old changes

```

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo ((d3c2a46...))
$ ll
total 2
-rw-r--r-- 1 ashwani.vaishya 1049089 32 May 17 14:24 hello3.txt
-rw-r--r-- 1 ashwani.vaishya 1049089 0 May 17 14:19 hello4.txt
-rw-r--r-- 1 ashwani.vaishya 1049089 11 May 17 13:52 README.md

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo ((d3c2a46...))
$ vim hello3.txt

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo ((d3c2a46...))
$ cat hello3.txt
1
2
3
4
5
6

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo ((d3c2a46...))
$ git add -A

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo ((d3c2a46...))
$ git commit -a -m "edited hello3"
[detached HEAD 1ad7eeb] edited hello3
1 file changed, 6 insertions(+), 7 deletions(-)

```

Here we have edited a file

```

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo ((1ad7eeb...))
$ git log
commit 1ad7eebd576043bd186067998a8b44156ccc8940 (HEAD)
Author: ashwani <ashwani.vaishya@gmail.com>
Date: Fri May 17 14:27:22 2019 +0530

    edited hello3

```

In logs we can see the commit with commit id

To revert back

**git checkout <previous commit id>**

```

commit d3c2a4693895084dd1b6fc16b129d531508a41c0 (first)
Author: ashwani <ashwani.vaishya@gmail.com>
Date: Fri May 17 14:23:01 2019 +0530

    edited hello4

```

Old commits



```

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo ((1ad7eeb...))
$ git checkout d3c2a4693895084dd1b6fc1
Warning: you are leaving 1 commit behind, not connected to
any of your branches:
1ad7eeb edited hello3
Here we have edited a file
If you want to keep it by creating a new branch, this may be a good time
to do so with:
git branch <new-branch-name> 1ad7eeb
HEAD is now at d3c2a46 edited hello4
In logs we can see the commit with commit id
ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo ((d3c2a46...))
$ cat hello3.txt
d
ewfew
f
ewf
ew
git checkout <previous commit id>
commit: d3c2a4693895084dd1b6fc16b129d531508a41c0 (first)
Author: ashwani <ashwani.vaishya@gmail.com>
Date: Fri May 17 14:23:01 2019 +0530

```

Now the changes has been reverted back.

#### 16. To push local repo to central repo i.e. GitHub

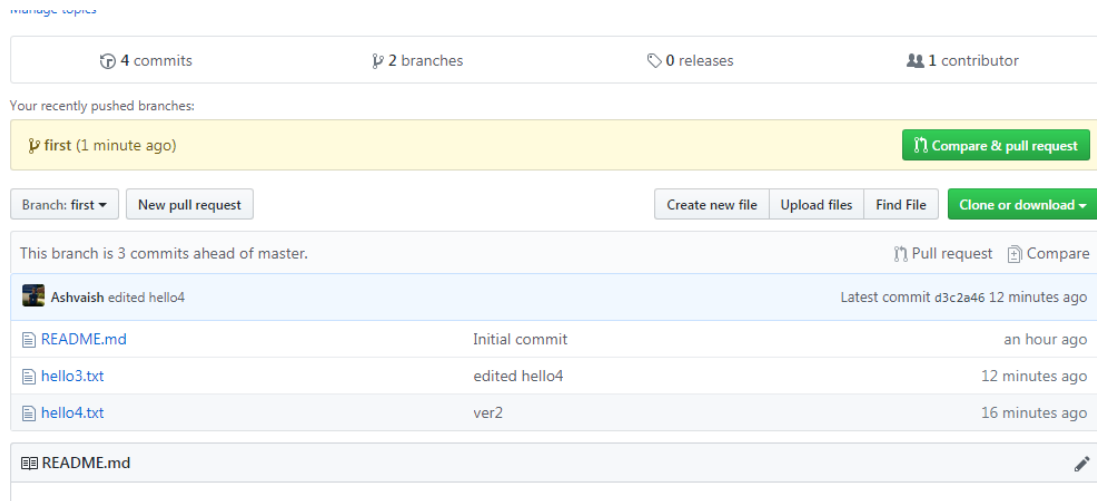
**git push origin first**

Enter the credentials for GitHub account.

```

ashwani.vaishya@YI1009265DT MINGW64 ~/Downloads/samp_repo (master)
$ git push origin first
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 4 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (8/8), 730 bytes | 243.00 KiB/s, done.
Total 8 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), done.
remote:
remote: Create a pull request for 'first' on GitHub by visiting:
remote: https://github.com/Ashvaish/demo_repo/pull/new/first
remote:
To https://github.com/Ashvaish/demo_repo.git
 * [new branch] first -> first

```



17. To get repo information

**git remote -v**

18. To remove all files from repo

**git reset**

To remove particular file from repo

**git reset <file name>**