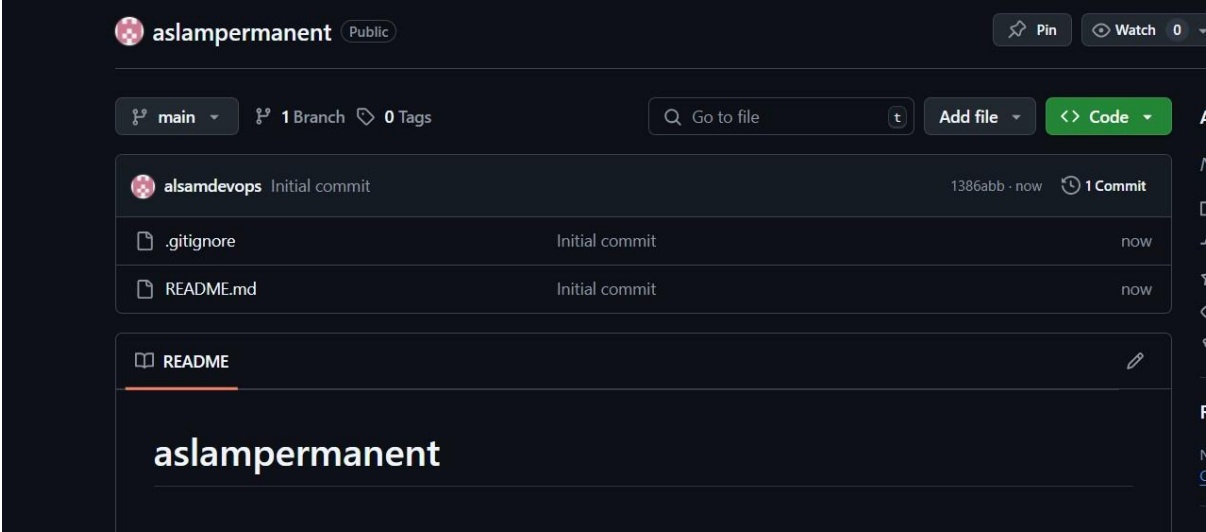


1)Install git.

```
masla@Hplaptop MINGW64 ~/Downloads/test (master)
$ git --version
git version 2.37.1.windows.1

masla@Hplaptop MINGW64 ~/Downloads/test (master)
```

2)Create a repo in github with README.md and .ignore file.



3)Clone the created repo to local.

```
masla@Hplaptop MINGW64 ~/Downloads/test (master)
$ git clone git@github.com:alsamdevops/testing.git
Cloning into 'testing'...
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 5 (delta 0), reused 5 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (5/5), done.
```

4)Create two files in local repo. and 5)Commit two files and push to central Repository.

```
masla@Hplaptop MINGW64 ~/Downloads/test/testing (master)
$ touch london singapore

masla@Hplaptop MINGW64 ~/Downloads/test/testing (master)
$ git status
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
(use "git push" to publish your local commits)

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

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

masla@Hplaptop MINGW64 ~/Downloads/test/testing (master)
$ git add /
fatal: C:/Program Files/Git/: 'C:/Program Files/Git/' is outside repository at 'C:/Users/masla/Downloads/test/testing'

masla@Hplaptop MINGW64 ~/Downloads/test/testing (master)
$ git add .

masla@Hplaptop MINGW64 ~/Downloads/test/testing (master)
$ git status
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
(use "git push" to publish your local commits)

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   london
    new file:   singapore

masla@Hplaptop MINGW64 ~/Downloads/test/testing (master)
$ git commit -m "adding two files"
[master 38777d9] adding two files
 2 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 london
 create mode 100644 singapore

masla@Hplaptop MINGW64 ~/Downloads/test/testing (master)
$ git push
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 460 bytes | 460.00 KiB/s, done.
Total 4 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (2/2), completed with 1 local object.
To github.com:alsamdevops/testing.git
 852d6b2..38777d9  master -> master
```

6)Create a branch in local and create a sample file and push to central.

```
masla@HpLaptop MINGW64 ~/Downloads/test/testing (master)
$ git checkout newbatch
Switched to branch 'newbatch'

masla@HpLaptop MINGW64 ~/Downloads/test/testing (newbatch)
$ ls
README.md  a  abc.txt  and  b  file1.txt  file2.txt  horizon.txt  london  singapore  techie.txt  z

masla@HpLaptop MINGW64 ~/Downloads/test/testing (newbatch)
$ git touch newbatch1 newbatch2
git: 'touch' is not a git command. See 'git --help'.

masla@HpLaptop MINGW64 ~/Downloads/test/testing (newbatch)
$ touch newbatch1 newbatch2

masla@HpLaptop MINGW64 ~/Downloads/test/testing (newbatch)
$ ls
README.md  a  abc.txt  and  b  file1.txt  file2.txt  horizon.txt  london  newbatch1  newbatch2  singapore  techie.txt  z

masla@HpLaptop MINGW64 ~/Downloads/test/testing (newbatch)
$ git add .

masla@HpLaptop MINGW64 ~/Downloads/test/testing (newbatch)
$ git commit -m " added new branch and pushing new files"
[newbatch be63ee1] added new branch and pushing new files
2 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 newbatch1
create mode 100644 newbatch2

masla@HpLaptop MINGW64 ~/Downloads/test/testing (newbatch)
$ git push - origin master
fatal: strange pathname '-' blocked

masla@HpLaptop MINGW64 ~/Downloads/test/testing (newbatch)
$ git push -u origin master
branch 'master' set up to track 'origin/master'.
Everything up-to-date

masla@HpLaptop MINGW64 ~/Downloads/test/testing (newbatch)
$ git push -u origin newbatch
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 270 bytes | 270.00 KiB/s, done.
Total 2 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote:
remote: Create a pull request for 'newbatch' on GitHub by visiting:
remote:   https://github.com/alsamdevops/testing/pull/new/newbatch
remote:
To github.com:alsamdevops/testing.git
 * [new branch]      newbatch -> newbatch
branch 'newbatch' set up to track 'origin/newbatch'.
```

7)Create a branch in github and clone that to local.

Branches

New branch

Overview

Yours

Active

Stale

All

Q

Search branches...

Default

Branch	Updated	Check status	Behind	Ahead	Pull request
main	53 minutes ago			Default	

Your branches

Branch	Updated	Check status	Behind	Ahead	Pull request
data	now		0	0	

Active branches

Branch	Updated	Check status	Behind	Ahead	Pull request
data	now		0	0	

```
masla@HpLaptop MINGW64 /d/online
$ git init
Initialized empty Git repository in D:/online/.git/

masla@HpLaptop MINGW64 /d/online (master)
$ ls

masla@HpLaptop MINGW64 /d/online (master)
$ git clone -b data git@github.com:alsamdevops/tasks.git
Cloning into 'tasks'...
remote: Enumerating objects: 6, done.
remote: Counting objects: 100% (6/6), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 6 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (6/6), done.

masla@HpLaptop MINGW64 /d/online (master)
$ |
```

8)Merge the created branch with master in git local.

```
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
  (use "git push" to publish your local commits)

You have unmerged paths.
  (fix conflicts and run "git commit")
  (use "git merge --abort" to abort the merge)

Changes to be committed:
  new file:   test.txt

Unmerged paths:
  (use "git add <file>..." to mark resolution)
    both added:    aslam1.txt

masla@Hplaptop MINGW64 /e/repository/workhere (master|MERGING)
$ vi aslam1.txt

masla@Hplaptop MINGW64 /e/repository/workhere (master|MERGING)
$ git merge --abort

masla@Hplaptop MINGW64 /e/repository/workhere (master)
$ git merge aslam1
Auto-merging aslam1.txt
CONFLICT (add/add): Merge conflict in aslam1.txt
Automatic merge failed; fix conflicts and then commit the result.

masla@Hplaptop MINGW64 /e/repository/workhere (master|MERGING)
$ git status
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
  (use "git push" to publish your local commits)

You have unmerged paths.
  (fix conflicts and run "git commit")
  (use "git merge --abort" to abort the merge)

Changes to be committed:
  new file:   test.txt

Unmerged paths:
  (use "git add <file>..." to mark resolution)
    both added:    aslam1.txt

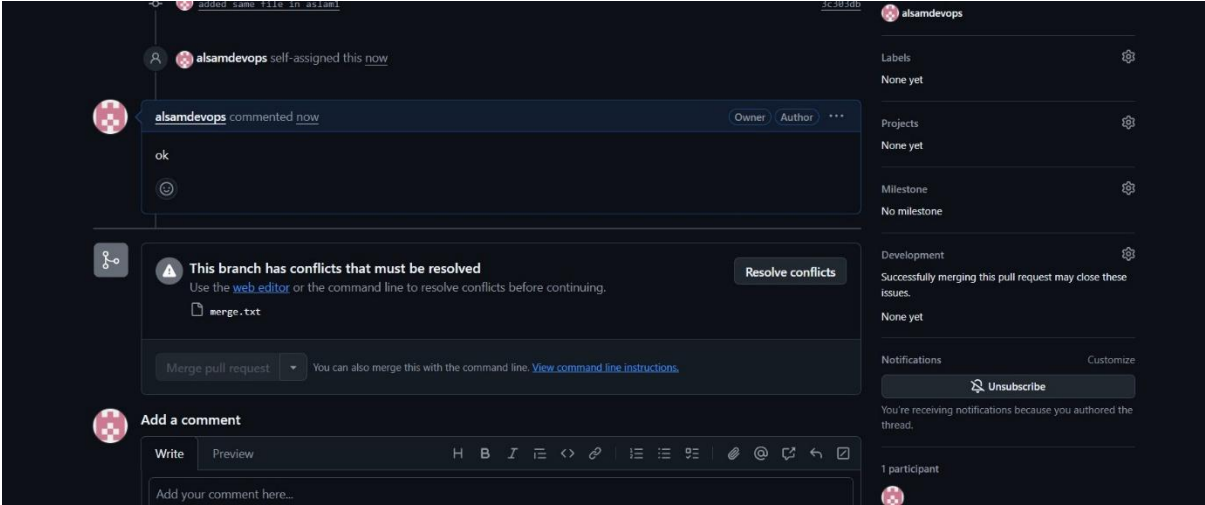
masla@Hplaptop MINGW64 /e/repository/workhere (master|MERGING)
$ vi aslam1.txt

masla@Hplaptop MINGW64 /e/repository/workhere (master|MERGING)
$ git add .

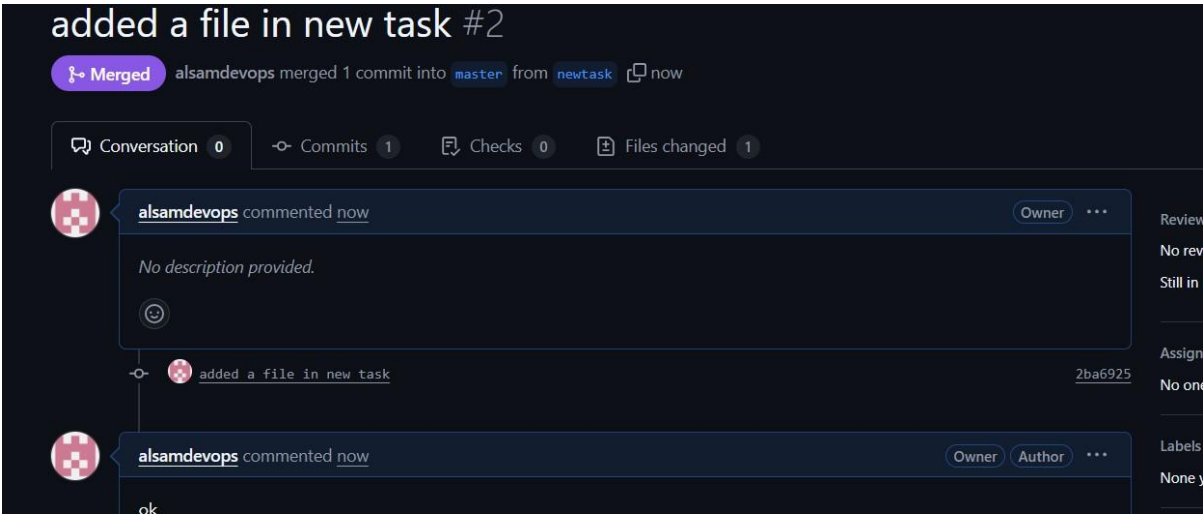
masla@Hplaptop MINGW64 /e/repository/workhere (master|MERGING)
$ git commit -m "merging"
[master 859b624] merging

masla@Hplaptop MINGW64 /e/repository/workhere (master)
$ |
```

9)Merge the created branch with master in github by sending a pull request.

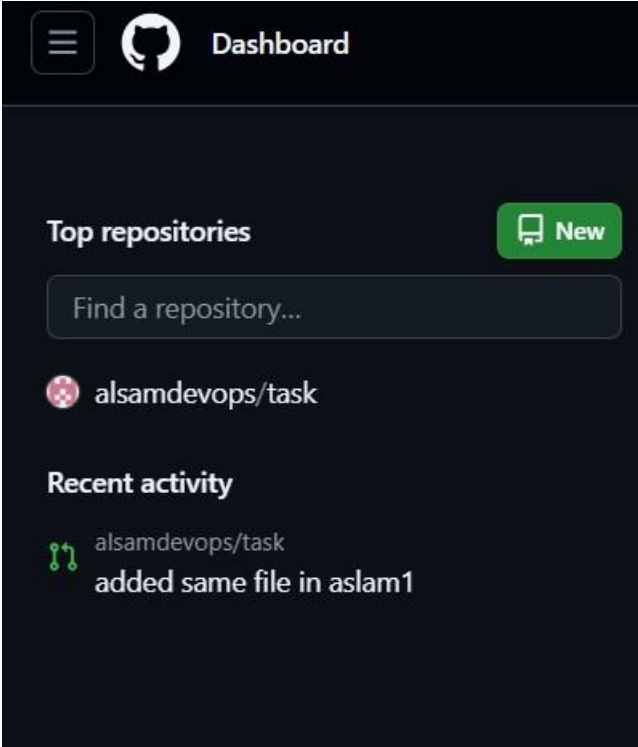






10)create a file in local and send that to branch in github.

	e	added some files	2 hours ago
	f	added some files	2 hours ago
	filetosendonline.txt	sending online	1 minute ago
	g	updated files	1 hour ago



```
masla@Hplaptop MINGW64 /e/repository/workhere (aslam1)
$ ls
a aslam1.txt b c d data e f filetosendonline.txt g merge.txt test.txt

masla@Hplaptop MINGW64 /e/repository/workhere (aslam1)
$ git status
On branch aslam1
Your branch is up to date with 'origin/aslam1'.

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

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

masla@Hplaptop MINGW64 /e/repository/workhere (aslam1)
$ git add .
warning: in the working copy of 'filetosendonline.txt', LF will be replaced by CRLF the next time Git touches it

masla@Hplaptop MINGW64 /e/repository/workhere (aslam1)
$ git commit -m "sending online"
[aslam1 3929171] sending online
1 file changed, 1 insertion(+)
create mode 100644 filetosendonline.txt

masla@Hplaptop MINGW64 /e/repository/workhere (aslam1)
$ git push
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 345 bytes | 172.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:alsamdevops/task.git
   3c303db..3929171 aslam1 -> aslam1

masla@Hplaptop MINGW64 /e/repository/workhere (aslam1)
$ |
```

11)clone only a branch from github to local.

```
masla@Hplaptop MINGW64 /e/repository/workhere (master)
$ git clone -b main git@github.com:alsamdevops/task.git
Cloning into 'task'...
fatal: Remote branch main not found in upstream origin

masla@Hplaptop MINGW64 /e/repository/workhere (master)
$ git clone -b master git@github.com:alsamdevops/task.git
Cloning into 'task'...
remote: Enumerating objects: 35, done.
remote: Counting objects: 100% (35/35), done.
remote: Compressing objects: 100% (15/15), done.
Receiving objects: 100% (35/35), done.
Resolving deltas: 100% (13/13), done.
remote: Total 35 (delta 13), reused 27 (delta 7), pack-reused 0 (from 0)

masla@Hplaptop MINGW64 /e/repository/workhere (master)
$ git branch --list

masla@Hplaptop MINGW64 /e/repository/workhere (master)
$ ls
task/

masla@Hplaptop MINGW64 /e/repository/workhere (master)
$ cd /task
bash: cd: /task: No such file or directory

masla@Hplaptop MINGW64 /e/repository/workhere (master)
$ cd task

masla@Hplaptop MINGW64 /e/repository/workhere/task (master)
$ ls
a  aslam.txt  aslam1.txt  b  c  d  data  e  f  g  hello.txt  merge.txt  newfile.txt  test.txt

masla@Hplaptop MINGW64 /e/repository/workhere/task (master)
$ git branch --list
* master

masla@Hplaptop MINGW64 /e/repository/workhere/task (master)
$ !
```

12)create a file with all passwords and make that untrackable with git.

```
$ vi .gitignore

nasla@Hplaptop MINGW64 /e/repository/workhere/task (master)
$ cat .gitignore
passwords.txt

nasla@Hplaptop MINGW64 /e/repository/workhere/task (master)
$ vi passwords.txt

nasla@Hplaptop MINGW64 /e/repository/workhere/task (master)
$ ls
. a aslam.txt aslam1.txt b c d data e f g hello.txt merge.txt ne

nasla@Hplaptop MINGW64 /e/repository/workhere/task (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)
        .gitignore
        1

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

nasla@Hplaptop MINGW64 /e/repository/workhere/task (master)
$ git add .
warning: in the working copy of '.gitignore', LF will be replaced by CRLF the
warning: in the working copy of '1', LF will be replaced by CRLF the next tim


nasla@Hplaptop MINGW64 /e/repository/workhere/task (master)
$ git commit -m "updated gitignore file and created passwords file"
[master 460da73] updated gitignore file and created passwords file
2 files changed, 3 insertions(+)
create mode 100644 .gitignore
create mode 100644 1

nasla@Hplaptop MINGW64 /e/repository/workhere/task (master)
$ git push
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (4/4), 380 bytes | 126.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:alsamdevops/task.git
   dcd0c61..460da73  master -> master

nasla@Hplaptop MINGW64 /e/repository/workhere/task (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean


nasla@Hplaptop MINGW64 /e/repository/workhere/task (master)
```

 **alsamdevops** updated gitignore file and created passwords file

Code

Blame

1 lines (1 loc) · 14 Bytes

 Code 55% faster with GitHub Copilot

1

passwords.txt



13)make a commit and make that commit reset without savings changes.

```
masla@Hplaptop MINGW64 /e/repository/workhere/task/task (master)
$ vi text.txt

masla@Hplaptop MINGW64 /e/repository/workhere/task/task (master)
$ git add .
warning: in the working copy of 'text.txt', LF will be replaced by CRLF the next time Git touches it

masla@Hplaptop MINGW64 /e/repository/workhere/task/task (master)
$ ls
1 a aslam.txt aslam1.txt b bye c comit.txt d data e f g hello.txt hi merge.txt newfile.txt test.txt text.txt who

masla@Hplaptop MINGW64 /e/repository/workhere/task/task (master)
$ git commit -m "for resetting test"
[master dcedca6] for resetting test
1 file changed, 1 insertion(+)
create mode 100644 text.txt

masla@Hplaptop MINGW64 /e/repository/workhere/task/task (master)
$ git reset --hard HEAD~1
HEAD is now at c3dc6c9 comit

masla@Hplaptop MINGW64 /e/repository/workhere/task/task (master)
$ |
```

14)Revert a committed commit to the older version.

```
masla@Hplaptop MINGW64 /e/repository/workhere/task/task (master)
$ git reset --hard 297bebbaf8c4d7f04c4c7a83016a84105ec20b8b
HEAD is now at 297bebb Merge branch 'master' of github.com:alsamdevops/task

masla@Hplaptop MINGW64 /e/repository/workhere/task/task (master)
$ |
```

15)push a file to stash without savings the changes and work on another file.

```
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   text.txt

masla@Hplaptop MINGW64 /e/repository/workhere/task/task (master)
$ git stash push -m "parking in stash for sometime " text.txt
Saved working directory and index state On master: parking in stash for sometime

masla@Hplaptop MINGW64 /e/repository/workhere/task/task (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean

masla@Hplaptop MINGW64 /e/repository/workhere/task/task (master)
$ vi help.txt

masla@Hplaptop MINGW64 /e/repository/workhere/task/task (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)
    help.txt

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

masla@Hplaptop MINGW64 /e/repository/workhere/task/task (master)
$ git add .
warning: in the working copy of 'help.txt', LF will be replaced by CRLF the next time Git touches it

masla@Hplaptop MINGW64 /e/repository/workhere/task/task (master)
$ git commit -m " stash test"
[master 59b833f] stash test
1 file changed, 1 insertion(+)
create mode 100644 help.txt

masla@Hplaptop MINGW64 /e/repository/workhere/task/task (master)
$ git push
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 295 bytes | 295.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:alsamdevops/task.git
   c3dc6c9..59b833f  master -> master

masla@Hplaptop MINGW64 /e/repository/workhere/task/task (master)
$ |
```

16)undo the stash file and start working on that again.

```
masla@Hplaptop MINGW64 /e/repository/workhere/task/task (master)
$ git stash pop
On branch master
Your branch is up to date with 'origin/master'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   text.txt

Dropped refs/stash@{0} (237f587d7def989dac9db700cd07602530acf919)

masla@Hplaptop MINGW64 /e/repository/workhere/task/task (master)
$
```

17)generate a ssh-keygen and configure into github.

```
masla@Hplaptop MINGW64 ~/Downloads/test (master)
$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/c/Users/masla/.ssh/id_rsa):
/c/Users/masla/.ssh/id_rsa already exists.
Overwrite (y/n)? yes
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /c/Users/masla/.ssh/id_rsa
Your public key has been saved in /c/Users/masla/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:mRJT2pQ8d8F3Nj1UimQWf4N34lVSeEAiD5fM3p2G+EU masla@Hplaptop
The key's randomart image is:
+----[RSA 3072]-----+
|      .o.o+O===*      |
|      =+ .O*++E*      |
|      + .o o++*BB      |
|      o o ..ooB+      |
|      . S . . +      |
|      .      .      |
|      .      .      |
|      .      .      |
|      .      .      |
+----[SHA256]-----+

masla@Hplaptop MINGW64 ~/Downloads/test (master)
$ cat /c/Users/masla/.ssh/id_rsa.pub
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQGC7giOF53M64Xj9iyWNjIbWW3ZPwTAVge3O9V5n2JEN
XPqj71LY6cMz09aXH8PUVFHH2QhAP6nvqZRsoDhwmDr0FDzouRGb8hFaG5KoR/ZUtkmEiH1Dn37UnAJH
9c5qAr1RH53YhxlLejoAsV3/wV38Fiyf17eTjpRixLQEwNjphztYXJ0eved0zkaoIm7zCZWc4c3TKTv
tnou96x4s7AM0Xnq0xhawTkASCws+EIuPqD4pVbQbNGbGT1Bt3jTASlDI0J0sHCuH3v6KKURDQPPAZn3
PmyBgb40ifvgKyyMLk9cv7gAHkUM2PFwFTjdH+w5swTHgof6tXtP0UXq+byZLYZ39KpmfIn/ZtUBn1N5
uMJI+xNN1GT0zJPzMkRuu62sVsGFfMvsphKbZoYmPF7IYPUKti0dtLXsSj8s0qUubkDLbbEHchG0mzs0
3y/6QVm7tPMCP0Qhzeg887Ld+5NbDpNqqM+mG1j1Pl+ltQ2Sh4Z5rYvDr1UKfaZxrEzqV0= masla@H
plaptop
```

## SSH keys

New SSH key

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

### Authentication keys



mylaptop

SHA256:mRJT2pQ8d8F3Nj1UimQWf4N34lVSeEAiD5fM3p2G+EU

Added on Jun 2, 2025

Last used within the last week — Read/write

Delete

Check out our guide to [connecting to GitHub using SSH keys](#) or troubleshoot [common SSH problems](#).

18)configure webhooks to github.



19)basic understanding of .git file.

Git file contains all the information of the project

```
masla@Hplaptop MINGW64 /e/repository/workhere (master)
$ ls -la
./ ../ .git/ a aslam.txt aslam1.txt b c d data e f g hello.txt merge.txt test.txt

masla@Hplaptop MINGW64 /e/repository/workhere (master)
$ cd .git/

masla@Hplaptop MINGW64 /e/repository/workhere/.git (GIT_DIR!)
$ ls
COMMIT_EDITMSG FETCH_HEAD HEAD ORIG_HEAD config description hooks/ index info/ logs/ objects/ refs/

masla@Hplaptop MINGW64 /e/repository/workhere/.git (GIT_DIR!)
$ !
```

20)Check all the logs of git.

```
masla@Hplaptop MINGW64 /e/repository/workhere (master)
$ git log
commit ff5b9d552e3d709e2c45e60bd98a19b360b26fab (HEAD -> master, origin/master, origin/HEAD)
Author: Mohammed_Aslam <aslamdevops@outlook.com>
Date: Thu Jun 5 15:15:20 2025 +0530

    added a file in master

commit 859b6247211b2b615945d7a0e6d649ba0d6aa47d
Merge: cba4dff 0b41424
Author: Mohammed_Aslam <aslamdevops@outlook.com>
Date: Thu Jun 5 15:12:24 2025 +0530

    merging

commit cba4dff1907808cf1db3330e3408f436693427a3
Author: Mohammed_Aslam <aslamdevops@outlook.com>
Date: Thu Jun 5 15:07:16 2025 +0530

    aded

commit 0b41424fd1d5d463bc620e4b1b5fb17311a4959a
Author: Mohammed_Aslam <aslamdevops@outlook.com>
Date: Thu Jun 5 15:04:37 2025 +0530

    aslam

commit 9c4fd5e8c9570e366a3da1fc4baae134a00bc5e0
Author: Mohammed_Aslam <aslamdevops@outlook.com>
Date: Thu Jun 5 14:49:30 2025 +0530

    welcome

commit c0d63c839ecf60f2f677c2d0c6465b51464caf7a (origin/aslam, aslam)
Author: Mohammed_Aslam <aslamdevops@outlook.com>
Date: Thu Jun 5 14:44:37 2025 +0530

    updated files

commit 5b789517dbf369f990ecf568dd27d5042a30927c
Author: Mohammed_Aslam <aslamdevops@outlook.com>
Date: Thu Jun 5 12:58:13 2025 +0530

    added some files

masla@Hplaptop MINGW64 /e/repository/workhere (master)
$ !
```

21)Rename the commit message.

```
masla@Hplaptop MINGW64 /e/repository/workhere/task/task (multiple)
$ git commit --amend -m "doing again commit"
[multiple 8365f45] doing again commit
Date: Thu Jun 5 17:14:01 2025 +0530
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 d

masla@Hplaptop MINGW64 /e/repository/workhere/task/task (multiple)
$ ls
a b c d

masla@Hplaptop MINGW64 /e/repository/workhere/task/task (multiple)
$ git status
On branch multiple
Your branch is ahead of 'origin/multiple' by 4 commits.
(use "git push" to publish your local commits)

nothing to commit, working tree clean

masla@Hplaptop MINGW64 /e/repository/workhere/task/task (multiple)
$ git log
commit 8365f459658e9e06f05c8f501c8340e11daba28d (HEAD -> multiple)
Author: Mohammed_Aslam <aslamdevops@outlook.com>
Date: Thu Jun 5 17:14:01 2025 +0530

    doing again commit
```

22)Merge multiple commits into single commit.

```
[detached HEAD 8b6407b] b
Date: Thu Jun 5 17:12:30 2025 +0530
3 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 b
create mode 100644 c
create mode 100644 d
Successfully rebased and updated refs/heads/multiple.

masla@Hplaptop MINGW64 /e/repository/workhere/task/task (multiple)
$ !
```