GIT COMMANDS

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git - -version
git config - -global user.name "Darshan Bhaiya"
git config - -global user.email "darshanbhaiya0403gmail.com"
git config - -global user.name
git config - -global user.email

Or => git config - -global - -edit

mkdir letsLearnGit
cd letsLearnGit

---

git init : git init turns any directory into a Git repository

ls => list of files

ls -a => to list all files and directories, including hidden ones, in a directory. The -a flag stands for
"all" and includes entries that start with a dot (.), which are typically hidden files or
directories.

git status : displays the state of the working directory and the staging area.

git add darshan.cpp : adds new or changed files in your working directory to the Git staging area.

git add . : all files come in staging area

git commit -m "message" : to commit (m mean message) => whatever files will be in staging
area will be committed , so check what is in staging area with git status

git log : command displays committed snapshots. It lets you list the project history, filter it,
and search for specific changes.

git checkout 90cf13e663fe69df4683a273dd7489874be69256: going to particular commit

git checkout master : returning to master branch (original one)

git branch: adding branch on current node

=> if we modify a file we have it add it in staging area before committing every time
=> we have main branch called as master and branches at different nodes

git branch branchName :git branch branch-name command is used to create a new branch
called branch-name

git branch : to see branches
*   beside master specifies that we are currently on that branch.

git checkout branchName: to go to branchName branch

git checkout -b branchName : new branch bann jayegi aur directyly uspe checkout bhi ho
jayega

git merge branchName : to merge the branchName into current branch

touch .gitignore : git doesn't track this file
Write any filename,folder name in this file and it will be ignored

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GIT HUB => how to push code to github
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git remote -v => to check origin for fetch and push

git remote add origin https://github.com/darshanbhaiya/Lets-Learn-Git.git

git branch -M main

git push -u origin main => push all changes to the origin and push maste(main)r branch
We can push any branch and origin can be named anything in "in git remote add origin ..."
(for that branch checkout that branch)

git push : used to upload local repository content to a remote repository to current (origin) and
of current branch
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GIT HUB => how to pull code to github
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cd .. => to get out of a already created repo

clone url => use url after forking , use to create local repo

ls : to check file names

cd: (go into that file directory) here specifically that repo

vim fileName : to open file in vim editor
i for insert mode in vim
Esc : wq enter
cat : create single or multiple files, view content of a file, concatenate files and redirect output in
terminal or files

git add fileName

git commit -m "message"

git push

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```
darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git status
On branch master

No commits yet

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

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

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git add darshan.cpp

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   darshan.cpp

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


darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git commit -m "initial content or your message"
[master (root-commit) 90cf13e] initial content or your message
 1 file changed, 7 insertions(+)
 create mode 100644 darshan.cpp

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git log
commit 90cf13e663fe69df4683a273dd7489874be69256 (HEAD -> master)
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 18:48:38 2024 +0530

    initial content or your message
```

```
darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git log
commit 90cf13e663fe69df4683a273dd7489874be69256 (HEAD -> master)
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 18:48:38 2024 +0530

    initial content or your message

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   darshan.cpp

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

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

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$
```

```
darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   darshan.cpp

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        bhaiya.cpp
        darshan.exe

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

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git add bhaiya.cpp

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   bhaiya.cpp

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   darshan.cpp

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


darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git commit -m "adding bhaiya.cpp"
[master bf6c89a] adding bhaiya.cpp
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 bhaiya.cpp

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git log
commit bf6c89afabee9e0fb252c1cb6a0059e5165d3997 (HEAD -> master)
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 19:14:10 2024 +0530

    adding bhaiya.cpp

commit 90cf13e663fe69df4683a273dd7489874be69256
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 18:48:38 2024 +0530

    initial content or your message

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$
```

```
darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   darshan.cpp

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

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

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git add .

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git commit -m "adding new cout in darshan.cpp"
[master 89c15fb] adding new cout in darshan.cpp
 2 files changed, 1 insertion(+)
 create mode 100644 darshan.exe

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git log
commit 89c15fb5fa3f32526829fa78c9e41dc4644b45cf (HEAD -> master)
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 19:18:28 2024 +0530

    adding new cout in darshan.cpp

commit bf6c89afabee9e0fb252c1cb6a0059e5165d3997
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 19:14:10 2024 +0530

    adding bhaiya.cpp

commit 90cf13e663fe69df4683a273dd7489874be69256
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 18:48:38 2024 +0530

    initial content or your message
```

```
darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git checkout 90cf13e663fe69df4683a273dd7489874be69256
Note: switching to '90cf13e663fe69df4683a273dd7489874be69256'.

You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by switching back to a branch.

If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -c with the switch command. Example:

  git switch -c <new-branch-name>

Or undo this operation with:

  git switch -

Turn off this advice by setting config variable advice.detachedHead to false

HEAD is now at 90cf13e initial content or your message

darsh@DB-03 MINGW64 ~/letsLearnGit ((90cf13e...))
$ git checkout master
Previous HEAD position was 90cf13e initial content or your message
Switched to branch 'master'

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git checkout 90cf13e663fe69df4683a273dd7489874be69256
Note: switching to '90cf13e663fe69df4683a273dd7489874be69256'.

You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by switching back to a branch.

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Or undo this operation with:

  git switch -

Turn off this advice by setting config variable advice.detachedHead to false

HEAD is now at 90cf13e initial content or your message

darsh@DB-03 MINGW64 ~/letsLearnGit ((90cf13e...))
$ git checkout master
Previous HEAD position was 90cf13e initial content or your message
Switched to branch 'master'
```

```
darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git checkout 90cf13e663fe69df4683a273dd7489874be69256
Note: switching to '90cf13e663fe69df4683a273dd7489874be69256'.

You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by switching back to a branch.

If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -c with the switch command. Example:

  git switch -c <new-branch-name>

Or undo this operation with:

  git switch -

Turn off this advice by setting config variable advice.detachedHead to false

HEAD is now at 90cf13e initial content or your message

darsh@DB-03 MINGW64 ~/letsLearnGit ((90cf13e...))
$ git branch
* (HEAD detached at 90cf13e)
  master

darsh@DB-03 MINGW64 ~/letsLearnGit ((90cf13e...))
$ git log
commit 90cf13e663fe69df4683a273dd7489874be69256 (HEAD)
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 18:48:38 2024 +0530

    initial content or your message

darsh@DB-03 MINGW64 ~/letsLearnGit ((90cf13e...))
$ git checkout master
Previous HEAD position was 90cf13e initial content or your message
Switched to branch 'master'

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git log
commit 89c15fb5fa3f32526829fa78c9e41dc4644b45cf (HEAD -> master)
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 19:18:28 2024 +0530

    adding new cout in darshan.cpp

commit bf6c89afabee9e0fb252c1cb6a0059e5165d3997
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 19:14:10 2024 +0530

    adding bhaiya.cpp

commit 90cf13e663fe69df4683a273dd7489874be69256
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 18:48:38 2024 +0530
```

```
darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git log
commit 89c15fb5fa3f32526829fa78c9e41dc4644b45cf (HEAD -> master)
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 19:18:28 2024 +0530

    adding new cout in darshan.cpp

commit bf6c89afabee9e0fb252c1cb6a0059e5165d3997
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 19:14:10 2024 +0530

    adding bhaiya.cpp

commit 90cf13e663fe69df4683a273dd7489874be69256
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 18:48:38 2024 +0530

    initial content or your message

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$
```

```
darsh@DB-03 MINGW64 ~
$ cd letsLearnGit

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git status
On branch master
nothing to commit, working tree clean

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git log
commit 89c15fb5fa3f32526829fa78c9e41dc4644b45cf (HEAD -> master)
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 19:18:28 2024 +0530

    adding new cout in darshan.cpp

commit bf6c89afabee9e0fb252c1cb6a0059e5165d3997
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 19:14:10 2024 +0530

    adding bhaiya.cpp

commit 90cf13e663fe69df4683a273dd7489874be69256
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 18:48:38 2024 +0530

    initial content or your message

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git branch dev

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git branch
  dev
* master

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git checkout dev
Switched to branch 'dev'

darsh@DB-03 MINGW64 ~/letsLearnGit (dev)
$ git checkout -b darshann/multiply
Switched to a new branch 'darshann/multiply'

darsh@DB-03 MINGW64 ~/letsLearnGit (darshann/multiply)
$ git status
On branch darshann/multiply
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   bhaiya.cpp

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

```
darsh@DB-03 MINGW64 ~/letsLearnGit (darshann/multiply)
$ git add bhaiya.cpp

darsh@DB-03 MINGW64 ~/letsLearnGit (darshann/multiply)
$ git status
On branch darshann/multiply
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   bhaiya.cpp


darsh@DB-03 MINGW64 ~/letsLearnGit (darshann/multiply)
$ git commit -m "added feature multiply"
[darshann/multiply c3218f3] added feature multiply
 1 file changed, 6 insertions(+)

darsh@DB-03 MINGW64 ~/letsLearnGit (darshann/multiply)
$ git checkout dev
Switched to branch 'dev'

darsh@DB-03 MINGW64 ~/letsLearnGit (dev)
$ git merge darshan/multiply
merge: darshan/multiply - not something we can merge

darsh@DB-03 MINGW64 ~/letsLearnGit (dev)
$ git checkOut darshan/multiply
git: 'checkOut' is not a git command. See 'git --help'.

The most similar command is
        checkout

darsh@DB-03 MINGW64 ~/letsLearnGit (dev)
$ git checkout darshan/multiply
error: pathspec 'darshan/multiply' did not match any file(s) known to git

darsh@DB-03 MINGW64 ~/letsLearnGit (dev)
$ git checkout darshann/multiply
Switched to branch 'darshann/multiply'

darsh@DB-03 MINGW64 ~/letsLearnGit (darshann/multiply)
$ git add multiply.cpp
fatal: pathspec 'multiply.cpp' did not match any files

darsh@DB-03 MINGW64 ~/letsLearnGit (darshann/multiply)
$ git add multiply.cpp

darsh@DB-03 MINGW64 ~/letsLearnGit (darshann/multiply)
$ git commit -m "added feature multiply.cpp"
[darshann/multiply 7befdd8] added feature multiply.cpp
 1 file changed, 6 insertions(+)
 create mode 100644 multiply.cpp

darsh@DB-03 MINGW64 ~/letsLearnGit (darshann/multiply)
$ git checkout dev
Switched to branch 'dev'
```

```
darsh@DB-03 MINGW64 ~/letsLearnGit (darshann/multiply)
$ git checkout dev
Switched to branch 'dev'

darsh@DB-03 MINGW64 ~/letsLearnGit (dev)
$ git merge darshann/multiply
Updating 89c15fb..7befdd8
Fast-forward
 bhaiya.cpp   | 6 ++++++
 multiply.cpp | 6 ++++++
 2 files changed, 12 insertions(+)
 create mode 100644 multiply.cpp

darsh@DB-03 MINGW64 ~/letsLearnGit (dev)
$ git log
commit 7befdd86e9e928e1bc858f25f549dd95f82956ef (HEAD -> dev, darshann/multiply)
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Tue Jan 23 23:59:48 2024 +0530

    added feature multiply.cpp

commit c3218f3d4febf29425514fba139e82ae08f0df65
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Tue Jan 23 23:52:17 2024 +0530

    added feature multiply

commit 89c15fb5fa3f32526829fa78c9e41dc4644b45cf (master)
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 19:18:28 2024 +0530

    adding new cout in darshan.cpp

commit bf6c89afabee9e0fb252c1cb6a0059e5165d3997
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 19:14:10 2024 +0530

    adding bhaiya.cpp

commit 90cf13e663fe69df4683a273dd7489874be69256
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 18:48:38 2024 +0530

    initial content or your message

darsh@DB-03 MINGW64 ~/letsLearnGit (dev)
$ git checkout master
Switched to branch 'master'
```

```
darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git log
commit 89c15fb5fa3f32526829fa78c9e41dc4644b45cf (HEAD -> master)
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 19:18:28 2024 +0530

    adding new cout in darshan.cpp

commit bf6c89afabee9e0fb252c1cb6a0059e5165d3997
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 19:14:10 2024 +0530

    adding bhaiya.cpp

commit 90cf13e663fe69df4683a273dd7489874be69256
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 18:48:38 2024 +0530

    initial content or your message

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git merge dev
Updating 89c15fb..7befdd8
Fast-forward
 bhaiya.cpp   | 6 ++++++
 multiply.cpp | 6 ++++++
 2 files changed, 12 insertions(+)
 create mode 100644 multiply.cpp

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git log
commit 7befdd86e9e928e1bc858f25f549dd95f82956ef (HEAD -> master, dev, darshann/multiply)
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Tue Jan 23 23:59:48 2024 +0530

    added feature multiply.cpp

commit c3218f3d4febf29425514fba139e82ae08f0df65
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Tue Jan 23 23:52:17 2024 +0530

    added feature multiply

commit 89c15fb5fa3f32526829fa78c9e41dc4644b45cf
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 19:18:28 2024 +0530

    adding new cout in darshan.cpp

commit bf6c89afabee9e0fb252c1cb6a0059e5165d3997
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 19:14:10 2024 +0530

    adding bhaiya.cpp
```

```
    added feature multiply

commit 89c15fb5fa3f32526829fa78c9e41dc4644b45cf
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 19:18:28 2024 +0530

    adding new cout in darshan.cpp

commit bf6c89afabee9e0fb252c1cb6a0059e5165d3997
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 19:14:10 2024 +0530

    adding bhaiya.cpp

commit 90cf13e663fe69df4683a273dd7489874be69256
Author: Darshan Bhaiya <darshanbhaiya0403@gmail.com>
Date:   Sun Jan 21 18:48:38 2024 +0530

    initial content or your message

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ |
```

```
darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ touch .gitignore

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ got status
bash: got: command not found

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        .gitignore
        seceretkey.txt

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

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        .gitignore
        seceretkey.txt

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

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        .gitignore

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

darsh@DB-03 MINGW64 ~/letsLearnGit (master)
$ git status
On branch master
nothing to commit, working tree clean
```