

## 1.git add

**Puts current working files into the stage.**

```
sohan@HPLaptop15s-fq5078 MINGW64 ~/Documents/code/Basic-operations (main)
$ git add
Nothing specified, nothing added.
hint: Maybe you wanted to say 'git add .'
hint: Turn this message off by running
hint: "git config advice.addEmptyPathsSpec false"

sohan@HPLaptop15s-fq5078 MINGW64 ~/Documents/code/Basic-operations (main)
$ git add shoppinglist.txt
```

## 2.git checkout

**Replaces the current working files with files from a branch.**

```
sohan@HPLaptop15s-fq5078 MINGW64 ~/Documents/code/Basic-operations (main)
$ git checkout main
Already on 'main'
Your branch is up to date with 'origin/main'.
```

## 3.git checkout -b

**Creates a new local branch from the current branch's tip.**

```
sohan@HPLaptop15s-fq5078 MINGW64 ~/Documents/code/Basic-operations (main)
$ git checkout -b main
fatal: a branch named 'main' already exists

sohan@HPLaptop15s-fq5078 MINGW64 ~/Documents/code/Basic-operations (main)
$ git checkout -b dev
Switched to a new branch 'dev'
```

## 4.git clone

**Clone an existing repository into a new directory.**

```
MINGW64:/c/Users/sohan/Documents/code/Basic-operations

sohan@HPLaptop15s-fq5078 MINGW64 ~
$ cd Documents

sohan@HPLaptop15s-fq5078 MINGW64 ~/Documents
$ cd code

sohan@HPLaptop15s-fq5078 MINGW64 ~/Documents/code
$ git clone https://github.com/SohanAvaneesh21/Basic-operations.git
Cloning into 'Basic-operations'...
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
Receiving objects: 100% (6/6), done.
```

## 5.git commit

Commits staged changes to a local branch.

```
sohan@HPLaptop15s-fq5078 MINGW64 ~/Documents/code/Basic-operations (main)
$ git commit -m "just added a file"
[main e75c5df] just added a file
1 file changed, 1 insertion(+)
create mode 100644 doc1.txt
```

## 6.git commit -a

Commits all modified files to a local branch(shorthand for “git add” followed by “git commit” for each modified file)

```
sohan@HPLaptop15s-fq5078 MINGW64 ~/Documents/code/Basic-operations (main)
$ git commit -a
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean
```

## 7.git fetch

Downloads changes from a remote repository into the local clone.

```
sohan@HPLaptop15s-fq5078 MINGW64 ~/Documents/code/Basic-operations (main)
$ git fetch

sohan@HPLaptop15s-fq5078 MINGW64 ~/Documents/code/Basic-operations (main)
$ git fetch origin

sohan@HPLaptop15s-fq5078 MINGW64 ~/Documents/code/Basic-operations (main)
$ git remote add upstream https://github.com/Chad-Hirsch/CS5820_VacuumWorld.git

sohan@HPLaptop15s-fq5078 MINGW64 ~/Documents/code/Basic-operations (main)
$ git fetch upstream
remote: Enumerating objects: 1318, done.
remote: Counting objects: 100% (7/7), done.
remote: Compressing objects: 100% (6/6), done.
remote: Total 1318 (delta 1), reused 7 (delta 1), pack-reused 1311
Receiving objects: 100% (1318/1318), 1.14 MiB | 410.00 KiB/s, done.
Resolving deltas: 100% (149/149), done.
From https://github.com/Chad-Hirsch/CS5820_VacuumWorld
* [new branch]      master      -> upstream/master
```

## 8.git merge

Merges files from a given branch into the current branch.

```
sohan@HPLaptop15s-fq5078 MINGW64 ~/Documents/code/Basic-operations (main)
$ git merge
Already up to date.
```

## 9.git pull

Fetches remote changes on the current branch into the local clone, and merges them into the current working files.

```
sohan@HPLaptop15s-fq5078 MINGW64 ~/Documents/code/Basic-operations (main)
$ git pull origin main
From https://github.com/SohanAvaneesh21/Basic-operations
* branch          main          -> FETCH_HEAD
Already up to date.
```

## 10.git push

Uploads changes from all local branches to the respective remote repositories.

```
sohan@HPLaptop15s-fq5078 MINGW64 ~/Documents/code/Basic-operations (main)
$ git push origin main
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 333 bytes | 333.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/SohanAvaneesh21/Basic-operations.git
150d7c1..e75c5df  main -> main
```

## 11.git reset

Makes the current branch point to some specific revision or branch

```
sohan@HPLaptop15s-fq5078 MINGW64 ~/Documents/code/Basic-operations (main)
$ git reset main
```

## 12.git rebase

Integrates changes from one branch into another. It is an alternative to the better known “merge” command.

```
sohan@HPLaptop15s-fq5078 MINGW64 ~/Documents/code/Basic-operations (main)
$ git rebase main
Current branch main is up to date.
```

### 13.git fork

Fork will create a copy of the repository in your GitHub account so that you can make changes to the project.

```
sohan@HPLaptop15s-fq5078 MINGW64 ~/Documents/code/Basic-operations (main)
$ git clone https://github.com/sohanaravapalli/CS5820_VacuumWorld.git
Cloning into 'CS5820_VacuumWorld'...
```