

# Basic commit

```
MINGW64/c/Users/VISHNU/desktop/git-katas
VISHNURDESKTOP-P4F8MGU MINGW64 ~
$ cd desktop
VISHNURDESKTOP-P4F8MGU MINGW64 ~/desktop
$ cd git-katas
VISHNURDESKTOP-P4F8MGU MINGW64 ~/desktop/git-katas
$ git init
Initialized empty Git repository in C:/Users/VISHNU/Desktop/git-katas/.git/
VISHNURDESKTOP-P4F8MGU MINGW64 ~/desktop/git-katas (master)
$ git status
On branch master
No commits yet
nothing to commit (create/copy files and use "git add" to track)
VISHNURDESKTOP-P4F8MGU MINGW64 ~/desktop/git-katas (master)
$ git log
fatal: your current branch 'master' does not have any commits yet
VISHNURDESKTOP-P4F8MGU MINGW64 ~/desktop/git-katas (master)
$ touch example.txt
VISHNURDESKTOP-P4F8MGU MINGW64 ~/desktop/git-katas (master)
$ git status
On branch master
No commits yet
Untracked files:
  (use "git add <file>..." to include in what will be committed)
  example.txt
nothing added to commit but untracked files present (use "git add" to track)
VISHNURDESKTOP-P4F8MGU MINGW64 ~/desktop/git-katas (master)
$ git add .
VISHNURDESKTOP-P4F8MGU MINGW64 ~/desktop/git-katas (master)
$ git status
On branch master
No commits yet
Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
  new file:   example.txt
VISHNURDESKTOP-P4F8MGU MINGW64 ~/desktop/git-katas (master)
$ git commit -m "file added"
bash: git: command not found
VISHNURDESKTOP-P4F8MGU MINGW64 ~/desktop/git-katas (master)
$ git commit -m "file added"
```

```
MINGW64/c/Users/VISHNU/desktop/git-katas
VISHNURDESKTOP-P4F8MGU MINGW64 ~/desktop/git-katas (master)
$ git commit -m "file added"
bash: git: command not found
VISHNURDESKTOP-P4F8MGU MINGW64 ~/desktop/git-katas (master)
$ git commit -m "file added"
[master (root-commit) 6dfe859] file added
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 example.txt
VISHNURDESKTOP-P4F8MGU MINGW64 ~/desktop/git-katas (master)
$ git status
On branch master
nothing to commit, working tree clean
VISHNURDESKTOP-P4F8MGU MINGW64 ~/desktop/git-katas (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:   example.txt
no changes added to commit (use "git add" and/or "git commit -a")
VISHNURDESKTOP-P4F8MGU MINGW64 ~/desktop/git-katas (master)
$ git add .
VISHNURDESKTOP-P4F8MGU MINGW64 ~/desktop/git-katas (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
  modified:   example.txt
VISHNURDESKTOP-P4F8MGU MINGW64 ~/desktop/git-katas (master)
$ git commit
[master 80f69a0] file modified
1 file changed, 1 insertion(+)
VISHNURDESKTOP-P4F8MGU MINGW64 ~/desktop/git-katas (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:   example.txt
no changes added to commit (use "git add" and/or "git commit -a")
VISHNURDESKTOP-P4F8MGU MINGW64 ~/desktop/git-katas (master)
$ git log
commit b0f69ad40036bd54bf8953e036fab9a9004648aa (HEAD -> master)
Author: vishnuracharla6 <vishnu.racharla@zemosolabs.com>
Date: Sat Oct 9 09:54:42 2021 +0530
```

```
MINGW64/c/Users/VISHNU/desktop/git-katas
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:   example.txt

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

VISHNURDESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git add .

VISHNURDESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    modified:   example.txt

VISHNURDESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git commit
[master b0f69a0] file modified
1 file changed, 1 insertion(+)

VISHNURDESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (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:   example.txt

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

VISHNURDESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git log
commit b0f69a0d0036bd54bf8953e036fab9a9004648aa (HEAD -> master)
Author: vishnurachar lab <vishnu.racharla@zemosolabs.com>
Date: Sat Oct 9 09:54:42 2021 +0530

    file modified

commit 6dfe859e1cb4a50c19c7f92de995aa39670f51f7
Author: vishnurachar lab <vishnu.racharla@zemosolabs.com>
Date: Sat Oct 9 09:52:45 2021 +0530

    file added

VISHNURDESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git add .

VISHNURDESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git commit -m "latest modified"
[master a7a2f9c] latest modified
1 file changed, 2 insertions(+), 1 deletion(-)

VISHNURDESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ |
```

## Basic staging

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~
$ cd desktop

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop
$ cd git-katas

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ touch file1.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ cat file1.txt
this is vishnu racharla from zemoso
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ echo 2 >file1.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ cat file1.txt
2

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git diff

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git diff --staged

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git add file1.txt
warning: LF will be replaced by CRLF in file1.txt.
The file will have its original line endings in your working directory

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git diff

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git diff --staged
diff --git a/file1.txt b/file1.txt
new file mode 100644
index 0000000..0cfbf08
--- /dev/null
+++ b/file1.txt
@@ -0,0 +1 @@
+2

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ echo 3 >file1.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git diff
warning: LF will be replaced by CRLF in file1.txt.
The file will have its original line endings in your working directory
diff --git a/file1.txt b/file1.txt
index 0cfbf08..00750ed 100644
--- a/file1.txt
+++ b/file1.txt
@@ -1,1 @@
-2
+3
```

```

--- a/file1.txt
+++ b/file1.txt
@@ -1,1 @@
-2
+3

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git diff --staged
diff --git a/file1.txt b/file1.txt
new file mode 100644
index 0000000..0cfbf08
--- /dev/null
+++ b/file1.txt
@@ -0,0 +1 @@
+2

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   file1.txt

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:   file1.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git reset HEAD file1.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        file1.txt

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

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git add file1.txt
warning: LF will be replaced by CRLF in file1.txt.
The file will have its original line endings in your working directory

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git commit -m "stage commit"
[master 0f90ab5] stage commit
1 file changed, 1 insertion(+)
create mode 100644 file1.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git log
commit 0f90ab55693c8d30841bc3a23159d43b6c6684b2 (HEAD -> master)
Author: vishnuracharla6 <vishnu.racharla@zemosolabs.com>
Date: Sat Oct 9 12:17:16 2021 +0530

```

```
Author: vishnuracharla6 <vishnu.racharla@zemosolabs.com>
Date: Sat Oct 9 12:17:16 2021 +0530

stage commit

commit e58290361062ba658860a70960976da31185f280
Author: vishnuracharla6 <vishnu.racharla@zemosolabs.com>
Date: Sat Oct 9 12:04:57 2021 +0530

stage commit

commit a7a2f5c256981db476d1f1145f0e750457410805
Author: vishnuracharla6 <vishnu.racharla@zemosolabs.com>
Date: Sat Oct 9 09:56:55 2021 +0530

latest modified

commit b0f69a0d0036bd54bf8953e036fab9a9004648aa
Author: vishnuracharla6 <vishnu.racharla@zemosolabs.com>
Date: Sat Oct 9 09:54:42 2021 +0530

file modified

0 [sig] bash 192! sigpacket::process: Suppressing signal 18 to win32 proce
ss (pid 936)
Author: vishnuracharla6 <vishnu.racharla@zemosolabs.com>
Date: Sat Oct 9 12:17:16 2021 +0530

stage commit

commit e58290361062ba658860a70960976da31185f280
Author: vishnuracharla6 <vishnu.racharla@zemosolabs.com>
Date: Sat Oct 9 12:04:57 2021 +0530

stage commit

commit a7a2f5c256981db476d1f1145f0e750457410805
Author: vishnuracharla6 <vishnu.racharla@zemosolabs.com>
Date: Sat Oct 9 09:56:55 2021 +0530

latest modified

commit b0f69a0d0036bd54bf8953e036fab9a9004648aa
Author: vishnuracharla6 <vishnu.racharla@zemosolabs.com>
Date: Sat Oct 9 09:54:42 2021 +0530

file modified

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ echo 4 >file1.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ cat file1.txt
```

```
commit b0f69a0d0036bd54b18953e036fab9a9004648aa
Author: vishnuracharla6 <vishnu.racharla@zemosolabs.com>
Date: Sat Oct 9 09:54:42 2021 +0530

    file modified

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ echo 4 >file1.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ cat file1.txt
4

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (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:   file1.txt

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

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git checkout file1.txt
Updated 1 path from the index

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ cat file1.txt
3

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ git status
On branch master
nothing to commit, working tree clean

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (master)
$ |
```

## Basic Branching

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git branch
* master

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git branch mybranch

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git branch
* master
  mybranch

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git checkout mybranch
Switched to branch 'mybranch'

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (mybranch)
$ git status
On branch mybranch
nothing to commit, working tree clean

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (mybranch)
$ touch file2.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (mybranch)
$ vi file2.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (mybranch)
$ git add file2.txt
warning: LF will be replaced by CRLF in file2.txt.
The file will have its original line endings in your working directory

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (mybranch)
$ git commit -m "file2 commit in branching"
[mybranch 522bc89] file2 commit in branching
 1 file changed, 1 insertion(+)
 create mode 100644 file2.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (mybranch)
$ git log --oneline --graph
* 522bc89 (HEAD -> mybranch) file2 commit in branching
* a27d98f (master) first

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (mybranch)
$ git checkout master
Switched to branch 'master'

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git log --oneline --graph
* a27d98f (HEAD -> master) first

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ touch file3.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git commit -m "file3 commit in branching"
On branch master
```

```

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git commit -m "file3 commit in branching"
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        file3.txt

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

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git add -A

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git commit -m "file3 commit in branching"
[master 9ec038e] file3 commit in branching
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 file3.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git log --oneline --graph --all
* 9ec038e (HEAD -> master) file3 commit in branching
| * 522bc89 (mybranch) file2 commit in branching
|/
* a27d98f first

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git checkout mybranch
Switched to branch 'mybranch'

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (mybranch)
$ git log --oneline --graph --all
* 9ec038e (master) file3 commit in branching
| * 522bc89 (HEAD -> mybranch) file2 commit in branching
|/
* a27d98f first

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (mybranch)
$ ls
file1.txt  file2.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (mybranch)
$ git dif mybranch master
git: 'dif' is not a git command. See 'git --help'.

The most similar commands are
    diff
    config
    difftool
    init

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (mybranch)
$ git diff mybranch master
diff --git a/file2.txt b/file2.txt
deleted file mode 100644
index 425ee77..0000000
--- a/file2.txt

```

## Fast Forward merge



```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git branch uppercase

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git checkout uppercase
Switched to branch 'uppercase'

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (uppercase)
$ git status
On branch uppercase
nothing to commit, working tree clean

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (uppercase)
$ touch greeting.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (uppercase)
$ vi greeting.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (uppercase)
$ git add -A
warning: LF will be replaced by CRLF in greeting.txt.
The file will have its original line endings in your working directory

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (uppercase)
$ git commit -m "greeting file commit"
[uppercase 90ecb13] greeting file commit
1 file changed, 1 insertion(+)
create mode 100644 greeting.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (uppercase)
$ git branch
  master
  mybranch
* uppercase

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (uppercase)
$ git log --oneline --graph --all
* 90ecb13 (HEAD -> uppercase) greeting file commit
* 9ec038e (master) file3 commit in branching
| * 522bc89 (mybranch) file2 commit in branching
|/
* a27d98f first

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (uppercase)
$ git checkout master
Switched to branch 'master'

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ cat greeting.txt
cat: greeting.txt: No such file or directory

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git diff uppercase master
diff --git a/greeting.txt b/greeting.txt
deleted file mode 100644
index 800eff4..0000000
--- a/greeting.txt
```

```

* a27d98f first

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (uppercase)
$ git checkout master
Switched to branch 'master'

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ cat greeting.txt
cat: greeting.txt: No such file or directory

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git diff uppercase master
diff --git a/greeting.txt b/greeting.txt
deleted file mode 100644
index 800eff4..0000000
--- a/greeting.txt
+++ /dev/null
@@ -1 +0,0 @@
-grreting

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git merge uppercase
Updating 9ec038e..90ecb13
Fast-forward
 greeting.txt | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 greeting.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ cat greeting.txt
grreting

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git branch -d uppercase
Deleted branch uppercase (was 90ecb13).

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$

```

3 way merge

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git branch greeting

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git checkout greeting
Switched to branch 'greeting'

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (greeting)
$ touch greeting.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (greeting)
$ vi greeting.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (greeting)
$ git add -A

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (greeting)
$ git commit -m "greeting file in 3-way merge commit"
[greeting 21e9444] greeting file in 3-way merge commit
1 file changed, 1 insertion(+), 1 deletion(-)

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (greeting)
$ git checkout master
Switched to branch 'master'

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ touch README.md

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ vi README.md

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    README.md

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

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git add -A
warning: LF will be replaced by CRLF in README.md.
The file will have its original line endings in your working directory

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git commit -m "3 way merge Readme commit"
[master 9d562be] 3 way merge Readme commit
1 file changed, 1 insertion(+)
create mode 100644 README.md

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git log --oneline --graph --all
* 9d562be (HEAD -> master) 3 way merge Readme commit
| * 21e9444 (greeting) greeting file in 3-way merge commit
|/
* 90ecb13 greeting file commit
* 9ec038e file3 commit in branching
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git log --oneline --graph --all
* 9d562be (HEAD -> master) 3 way merge Readme commit
| * 21e9444 (greeting) greeting file in 3-way merge commit
|/
* 90ecb13 greeting file commit
* 9ec038e file3 commit in branching
| * 522bc89 (mybranch) file2 commit in branching
|/
* a27d98f first
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git diff greeting mybranch
diff --git a/file2.txt b/file2.txt
new file mode 100644
index 0000000..425ee77
--- /dev/null
+++ b/file2.txt
@@ -0,0 +1 @@
+hii this is vishnu
diff --git a/file3.txt b/file3.txt
deleted file mode 100644
index e69de29..0000000
diff --git a/greeting.txt b/greeting.txt
deleted file mode 100644
index ee46bdf..0000000
--- a/greeting.txt
+++ /dev/null
@@ -1,0 +0,0 @@
-grreting to vishnu
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git merge greeting
Merge made by the 'recursive' strategy.
 greeting.txt | 2 +-
 1 file changed, 1 insertion(+), 1 deletion(-)
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git log --oneline --graph --all
error: switch `l' expects a numerical value
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git log --oneline --graph --all
* 6fa1c70 (HEAD -> master) Merge branch 'greeting'
| \
| * 21e9444 (greeting) greeting file in 3-way merge commit
* | 9d562be 3 way merge Readme commit
|/
* 90ecb13 greeting file commit
* 9ec038e file3 commit in branching
| * 522bc89 (mybranch) file2 commit in branching
|/
* a27d98f first
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$
```

## Merge conflict

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ cat greeting.txt
grreting to vishnu

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ echo "good morning" >greeting.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git branch merge-conflict-branch1

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ echo "good evening" >greeting.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ cat greeting.txt
good evening

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git add -A
warning: LF will be replaced by CRLF in greeting.txt.
The file will have its original line endings in your working directory

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git commit -m "greeting conflict in master"
[master 875d70c] greeting conflict in master
1 file changed, 1 insertion(+), 1 deletion(-)

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git checkout merge-conflict-branch1
Switched to branch 'merge-conflict-branch1'

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (merge-conflict-branch1)
$ ls
README.md  file1.txt  file3.txt  greeting.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (merge-conflict-branch1)
$ echo "good night" >greeting.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (merge-conflict-branch1)
$ cat greeting.txt
good night

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (merge-conflict-branch1)
$ git add -A
warning: LF will be replaced by CRLF in greeting.txt.
The file will have its original line endings in your working directory

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (merge-conflict-branch1)
$ git commit -m "greeting conflict in merge-conflict"
[merge-conflict-branch1 5d1225b] greeting conflict in merge-conflict
1 file changed, 1 insertion(+), 1 deletion(-)

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (merge-conflict-branch1)
$ git checkout master
Switched to branch 'master'

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
```

```

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (merge-conflict-branch1)
$ git checkout master
Switched to branch 'master'

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git merge merge-conflict-branch1
Auto-merging greeting.txt
CONFLICT (content): Merge conflict in greeting.txt
Automatic merge failed; fix conflicts and then commit the result.

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master|MERGING)
$ cat greeting.txt
<<<<<<< HEAD
good evening
=====
good night
>>>>>>> merge-conflict-branch1

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master|MERGING)
$ vi greeting.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master|MERGING)
$ cat greeting.txt
<<<<<<< HEAD
good evening
>>>>>>> merge-conflict-branch1

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master|MERGING)
$ git add -A

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master|MERGING)
$ git commit -m "greeting conflict final"
[master 2b06c04] greeting conflict final

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git log --oneline --graph --all
* 2b06c04 (HEAD -> master) greeting conflict final
| \
| * 5d1225b (merge-conflict-branch1) greeting conflict in merge-conflict
| * | 875d70c greeting conflict in master
|/
| * 6fa1c70 Merge branch 'greeting'
| \
| * 21e9444 (greeting) greeting file in 3-way merge commit
| * | 9d562be 3 way merge Readme commit
|/
| * 90ecb13 greeting file commit
| * 9ec038e file3 commit in branching
| * 522bc89 (mybranch) file2 commit in branching
|/
* a27d98f first

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$

```

Merge -Mergesort

```

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git branch mergesort-impl

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ echo 1 >greeting.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git add -A
warning: LF will be replaced by CRLF in greeting.txt.
The file will have its original line endings in your working directory

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git commit -m "master mergesort-impl "
[master 59dfada] master mergesort-impl
1 file changed, 1 insertion(+), 3 deletions(-)

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git checkout mergesort-impl
Switched to branch 'mergesort-impl'

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (mergesort-impl)
$ echo 2 >greeting.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (mergesort-impl)
$ git add -A
warning: LF will be replaced by CRLF in greeting.txt.
The file will have its original line endings in your working directory

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (mergesort-impl)
$ git commit -m "mergesort-impl commit"
[mergesort-impl 27407fc] mergesort-impl commit
1 file changed, 1 insertion(+), 3 deletions(-)

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (mergesort-impl)
$ git checkout master
Switched to branch 'master'

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git merge mergesort-impl
Auto-merging greeting.txt
CONFLICT (content): Merge conflict in greeting.txt
Automatic merge failed; fix conflicts and then commit the result.

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master|MERGING)
$ cat greeting.txt
<<<<<<< HEAD
1
=====
2
>>>>>>> mergesort-impl

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master|MERGING)
$ git branch
  greeting
* master
  merge-conflict-branch1
  mergesort-impl
  mybranch

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master|MERGING)
$ git mergetool --tool=vimdiff
Merging:
greeting.txt

Normal merge conflict for 'greeting.txt':
  {local}: modified file
  {remote}: modified file

```

```
1 <<<<<< HEAD
good evening
>>>>>> merge-conflict-b
2

<(21:33 09/10/2021)1,1 All <(21:33 09/10/2021)1,1 All ./greeting_REMOTE_1222.txt [dos] (21:33 09/10/2021)
1 <<<<<< HEAD
2
>>>>>> mergesort-impl
```



## Rebase branch

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git branch
greeting
* master
merge-conflict-branch1
mergesort-impl
mybranch

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git log --oneline --graph --all
* 30ea3a2 (HEAD -> master) mergetool commit
| \
| * 27407fc (mergesort-impl) mergesort-impl commit
| * | 59dfada master mergesort-impl
| /
| \
| * 2b06c04 greeting conflict final
| \
| * 5d1225b (merge-conflict-branch1) greeting conflict in merge-conflict
| * | 875d70c greeting conflict in master
| /
| \
| * 6fa1c70 Merge branch 'greeting'
| \
| * 21e9444 (greeting) greeting file in 3-way merge commit
| * | 9d562be 3 way merge Readme commit
| /
| \
| * 90ecb13 greeting file commit
| * 9ec038e file3 commit in branching
| * 522bc89 (mybranch) file2 commit in branching
| /
* a27d98f first

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git checkout mybranch
Switched to branch 'mybranch'

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (mybranch)
$ git rebase master
Successfully rebased and updated refs/heads/mybranch.

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (mybranch)
$ git checkout master
Switched to branch 'master'
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git merge mybranch
Updating 30ea3a2..88f75ae
Fast-forward
 file2.txt | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 file2.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git log --oneline --graph --all
* 88f75ae (HEAD -> master, mybranch) file2 commit in branching
* 30ea3a2 mergetool commit
| \
| * 27407fc (mergesort-impl) mergesort-impl commit
* | 59dfada master mergesort-impl
| /
* 2b06c04 greeting conflict final
| \
| * 5d1225b (merge-conflict-branch1) greeting conflict in merge-conflict
* | 875d70c greeting conflict in master
| /
* 6fa1c70 Merge branch 'greeting'
| \
| * 21e9444 (greeting) greeting file in 3-way merge commit
* | 9d562be 3 way merge Readme commit
| /
* 90ecb13 greeting file commit
* 9ec038e file3 commit in branching
* a27d98f first
```

## Basic revert

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git log --decorate --oneline
88f75ae (HEAD -> master, mybranch) file2 commit in branching
30ea3a2 mergetool commit
27407fc (mergesort-impl) mergesort-impl commit
59dfada master mergesort-impl
2b06c04 greeting conflict final
5d1225b (merge-conflict-branch1) greeting conflict in merge-conflict
875d70c greeting conflict in master
6fa1c70 Merge branch 'greeting'
9d562be 3 way merge Readme commit
21e9444 (greeting) greeting file in 3-way merge commit
90ecb13 greeting file commit
9ec038e file3 commit in branching
a27d98f first

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ cat greeting.txt

1

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ echo 'hi' >greeting.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git add -A
warning: LF will be replaced by CRLF in greeting.txt.
The file will have its original line endings in your working directory

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git commit -m 'sample'
[master f4f79c1] sample
1 file changed, 1 insertion(+), 2 deletions(-)

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git log --decorate --oneline
f4f79c1 (HEAD -> master) sample
88f75ae (mybranch) file2 commit in branching
30ea3a2 mergetool commit
27407fc (mergesort-impl) mergesort-impl commit
59dfada master mergesort-impl
2b06c04 greeting conflict final
5d1225b (merge-conflict-branch1) greeting conflict in merge-conflict
875d70c greeting conflict in master
6fa1c70 Merge branch 'greeting'
9d562be 3 way merge Readme commit
21e9444 (greeting) greeting file in 3-way merge commit
90ecb13 greeting file commit
9ec038e file3 commit in branching
a27d98f first

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git add -A

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git commit -m "sample"
```

```
$ git add -A
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
```

```
$ git commit -m "sample"
```

```
On branch master
```

```
nothing to commit, working tree clean
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
```

```
$ git revert f4f79c1
```

```
[master 36b67f4] Revert "sample"
```

```
1 file changed, 2 insertions(+), 1 deletion(-)
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
```

```
$ git log --decorate --oneline
```

```
36b67f4 (HEAD -> master) Revert "sample"
```

```
f4f79c1 sample
```

```
88f75ae (mybranch) file2 commit in branching
```

```
30ea3a2 mergetool commit
```

```
27407fc (mergesort-impl) mergesort-impl commit
```

```
59dfada master mergesort-impl
```

```
2b06c04 greeting conflict final
```

```
5d1225b (merge-conflict-branch1) greeting conflict in merge-conflict
```

```
875d70c greeting conflict in master
```

```
6fa1c70 Merge branch 'greeting'
```

```
9d562be 3 way merge Readme commit
```

```
21e9444 (greeting) greeting file in 3-way merge commit
```

```
90ecb13 greeting file commit
```

```
9ec038e file3 commit in branching
```

```
a27d98f first
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
```

```
$ ls
```

```
README.md file3.txt greeting_BASE_1222.txt
```

```
file1.txt greeting.txt greeting_LOCAL_1222.txt
```

```
file2.txt greeting_BACKUP_1222.txt greeting_REMOTE_1222.txt
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
```

```
$ git log --decorate --oneline
```

```
36b67f4 (HEAD -> master) Revert "sample"
```

```
f4f79c1 sample
```

```
88f75ae (mybranch) file2 commit in branching
```

```
30ea3a2 mergetool commit
```

```
27407fc (mergesort-impl) mergesort-impl commit
```

```
59dfada master mergesort-impl
```

```
2b06c04 greeting conflict final
```

```
5d1225b (merge-conflict-branch1) greeting conflict in merge-conflict
```

```
875d70c greeting conflict in master
```

```
6fa1c70 Merge branch 'greeting'
```

```
9d562be 3 way merge Readme commit
```

```
21e9444 (greeting) greeting file in 3-way merge commit
```

```
90ecb13 greeting file commit
```

```
9ec038e file3 commit in branching
```

```
a27d98f first
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
```

```
$ git revert 36b67f4
```

```
[master 730c785] Revert "Revert "sample""
```



Type here to search



```

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git log --decorate --oneline
730c785 (HEAD -> master) Revert "Revert "sample""
36b67f4 Revert "sample"
f4f79c1 sample
88f75ae (mybranch) file2 commit in branching
30ea3a2 mergetool commit
27407fc (mergesort-impl) mergesort-impl commit
59dfada master mergesort-impl
2b06c04 greeting conflict final
5d1225b (merge-conflict-branch1) greeting conflict in merge-conflict
875d70c greeting conflict in master
6fa1c70 Merge branch 'greeting'
9d562be 3 way merge Readme commit
21e9444 (greeting) greeting file in 3-way merge commit
90ecb13 greeting file commit
9ec038e file3 commit in branching
a27d98f first

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git revert 36b67f4
On branch master
nothing to commit, working tree clean

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git show 36b67f4
commit 36b67f43c1f603608fa6ab357b069e92a4302aed
Author: vishnuracharla6 <vishnu.racharla@zemosolabs.com>
Date: Sat Oct 9 22:56:40 2021 +0530

    Revert "sample"

    This reverts commit f4f79c112e93eb5e8cc6a9ba42f676a633dc172e.

diff --git a/greeting.txt b/greeting.txt
index 45b983b..a464d9d 100644
--- a/greeting.txt
+++ b/greeting.txt
@@ -1,2 @@
-hi
+
+1

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ |

```

Basic reset

```

VISHNU@DESKTOP-P4F8HGU MINGW64 ~
$ cd desktop

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop
$ cd git_katas

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ ls -l
total 7
-rw-r--r-- 1 VISHNU 197121 63 Oct  9 21:58 README.md
-rw-r--r-- 1 VISHNU 197121  0 Oct  9 16:45 file1.txt
-rw-r--r-- 1 VISHNU 197121 20 Oct  9 22:10 file2.txt
-rw-r--r-- 1 VISHNU 197121  0 Oct  9 21:58 file3.txt
-rw-r--r-- 1 VISHNU 197121  4 Oct  9 23:04 greeting.txt
-rw-r--r-- 1 VISHNU 197121 53 Oct  9 21:58 greeting_BACKUP_1222.txt
-rw-r--r-- 1 VISHNU 197121 60 Oct  9 21:58 greeting_BASE_1222.txt
-rw-r--r-- 1 VISHNU 197121  3 Oct  9 21:58 greeting_LOCAL_1222.txt
-rw-r--r-- 1 VISHNU 197121  3 Oct  9 21:58 greeting_REMOTE_1222.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git log --oneline
730c785 (HEAD -> master) Revert "Revert "sample""
36b67f4 Revert "sample"
f4f79c1 sample
88f75ae (mybranch) file2 commit in branching
30ea3a2 mergetool commit
27407fc (mergesort-impl) mergesort-impl commit
59dfada master mergesort-impl
2b06c04 greeting conflict final
5d1225b (merge-conflict-branch1) greeting conflict in merge-conflict
875d70c greeting conflict in master
6fa1c70 Merge branch 'greeting'
9d562be 3 way merge Readme commit
21e9444 (greeting) greeting file in 3-way merge commit
90ecb13 greeting file commit
9ec038e file3 commit in branching
a27d98f first

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git reset --soft HEAD~1

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ ls -l
total 7
-rw-r--r-- 1 VISHNU 197121 63 Oct  9 21:58 README.md
-rw-r--r-- 1 VISHNU 197121  0 Oct  9 16:45 file1.txt
-rw-r--r-- 1 VISHNU 197121 20 Oct  9 22:10 file2.txt
-rw-r--r-- 1 VISHNU 197121  0 Oct  9 21:58 file3.txt
-rw-r--r-- 1 VISHNU 197121  4 Oct  9 23:04 greeting.txt
-rw-r--r-- 1 VISHNU 197121 53 Oct  9 21:58 greeting_BACKUP_1222.txt
-rw-r--r-- 1 VISHNU 197121 60 Oct  9 21:58 greeting_BASE_1222.txt
-rw-r--r-- 1 VISHNU 197121  3 Oct  9 21:58 greeting_LOCAL_1222.txt
-rw-r--r-- 1 VISHNU 197121  3 Oct  9 21:58 greeting_REMOTE_1222.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git log --oneline

```

```
-rw-r--r-- 1 VISHNU 197121 3 Oct  9 21:58 greeting_LOCAL_1222.txt
-rw-r--r-- 1 VISHNU 197121 3 Oct  9 21:58 greeting_REMOTE_1222.txt
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git log --oneline
36b67f4 (HEAD -> master) Revert "sample"
f4f79c1 sample
88f75ae (mybranch) file2 commit in branching
30ea3a2 mergetool commit
27407fc (mergesort-impl) mergesort-impl commit
59dfada master mergesort-impl
2b06c04 greeting conflict final
5d1225b (merge-conflict-branch1) greeting conflict in merge-conflict
875d70c greeting conflict in master
6fa1c70 Merge branch 'greeting'
9d562be 3 way merge Readme commit
21e9444 (greeting) greeting file in 3-way merge commit
90ecb13 greeting file commit
9ec038e file3 commit in branching
a27d98f first
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git status
git: 'status' is not a git command. See 'git --help'.
```

The most similar command is  
status

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   greeting.txt
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ cat greeting.txt
hi
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git reset --hard HEAD~1
HEAD is now at f4f79c1 sample
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ ls -l
total 7
-rw-r--r-- 1 VISHNU 197121 63 Oct  9 21:58 README.md
-rw-r--r-- 1 VISHNU 197121  0 Oct  9 16:45 file1.txt
-rw-r--r-- 1 VISHNU 197121 20 Oct  9 22:10 file2.txt
-rw-r--r-- 1 VISHNU 197121  0 Oct  9 21:58 file3.txt
-rw-r--r-- 1 VISHNU 197121  4 Oct  9 23:04 greeting.txt
-rw-r--r-- 1 VISHNU 197121 53 Oct  9 21:58 greeting_BACKUP_1222.txt
-rw-r--r-- 1 VISHNU 197121 60 Oct  9 21:58 greeting_BASE_1222.txt
-rw-r--r-- 1 VISHNU 197121  3 Oct  9 21:58 greeting_LOCAL_1222.txt
-rw-r--r-- 1 VISHNU 197121  3 Oct  9 21:58 greeting_REMOTE_1222.txt
```

```
-rw-r--r-- 1 VISHNU 197121 3 Oct 9 21:58 greeting_LOCAL_1222.txt
-rw-r--r-- 1 VISHNU 197121 3 Oct 9 21:58 greeting_REMOTE_1222.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git log --oneline
f4f79c1 (HEAD -> master) sample
88f75ae (mybranch) file2 commit in branching
30ea3a2 mergetool commit
27407fc (mergesort-impl) mergesort-impl commit
59dfada master mergesort-impl
2b06c04 greeting conflict final
5d1225b (merge-conflict-branch1) greeting conflict in merge-conflict
875d70c greeting conflict in master
6falc70 Merge branch 'greeting'
9d562be 3 way merge Readme commit
21e9444 (greeting) greeting file in 3-way merge commit
90ecb13 greeting file commit
9ec038e file3 commit in branching
a27d98f first

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git status
On branch master
nothing to commit, working tree clean

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ |
```

Git clean



```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ ls -R
.:
README.md  file2.txt      greeting_BACKUP_1222.txt  greeting_REMOTE_1222.txt
ex.obj     file3.txt      greeting_BASE_1222.txt   mylib.c
file1.txt  greeting.txt   greeting_LOCAL_1222.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ touch mylib1.c

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git clean -n
Would remove mylib1.c

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git add mylib1.c

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ touch ex.obj

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git clean -n

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ touch exm.obj

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git clean -n
Would remove exm.obj

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git clean -n -d
Would remove exm.obj

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   mylib1.c

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

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git add exm.obj

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   exm.obj
    new file:   mylib1.c
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git add exm.obj

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   exm.obj
    new file:   mylib1.c

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git clean -n

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git clean -n -d

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ ls -R
.:
README.md  file2.txt      greeting_BASE_1222.txt  mylib1.c
ex.obj     file3.txt      greeting_LOCAL_1222.txt
exm.obj    greeting.txt    greeting_REMOTE_1222.txt
file1.txt  greeting_BACKUP_1222.txt  mylib.c

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$
```

## Git amend

```

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   exm.obj
    new file:   mylib1.c

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git log -p
commit 56b9cabd6819010e6e59733d0962e8f7ca6df71e (HEAD -> master)
Author: vishnuracharla6 <vishnu.racharla@zemosolabs.com>
Date:   Sun Oct 10 14:15:27 2021 +0530

    added mylib

diff --git a/mylib.c b/mylib.c
index 896def9..a77a331 100644
--- a/mylib.c
+++ b/mylib.c
@@ -1,1 @@
-println
+println
+println

commit 31179fdb3825143893307d5539e02ddc28b46116
Author: vishnuracharla6 <vishnu.racharla@zemosolabs.com>
Date:   Sun Oct 10 14:13:56 2021 +0530

    files added

diff --git a/ex.obj b/ex.obj
new file mode 100644
index 0000000..ca0e242

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ touch bar.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git add bar.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git commit --amend
[master ca20aae] this is amend added mylib
Date: Sun Oct 10 14:15:27 2021 +0530
4 files changed, 1 insertion(+), 1 deletion(-)
create mode 100644 bar.txt
create mode 100644 exm.obj
create mode 100644 mylib1.c

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git log -p
commit ca20aae181a9154c8da99b7cbef83b55b188e309 (HEAD -> master)
Author: vishnuracharla6 <vishnu.racharla@zemosolabs.com>
Date:   Sun Oct 10 14:15:27 2021 +0530

```

```

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git commit --amend
[master ca20aae] this is amend added mylib
Date: Sun Oct 10 14:15:27 2021 +0530
4 files changed, 1 insertion(+), 1 deletion(-)
create mode 100644 bar.txt
create mode 100644 exm.obj
create mode 100644 mylib1.c

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git log -p
commit ca20aae181a9154c8da99b7cbef83b55b188e309 (HEAD -> master)
Author: vishnuracharla6 <vishnu.racharla@zemosolabs.com>
Date: Sun Oct 10 14:15:27 2021 +0530

    this is amend added mylib

diff --git a/bar.txt b/bar.txt
new file mode 100644
index 0000000..e69de29
diff --git a/exm.obj b/exm.obj
new file mode 100644
index 0000000..e69de29
diff --git a/mylib.c b/mylib.c
index 896def9..a77a331 100644
--- a/mylib.c
+++ b/mylib.c
@@ -1,1 @@
-println
+vishnu
diff --git a/mylib1.c b/mylib1.c
new file mode 100644
index 0000000..e69de29

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git status
On branch master
nothing to commit, working tree clean

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$

```

Git squashing

```

VISHNU@DESKTOP-P4F8HGU MINGW64 ~
$ cd desktop

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop
$ cd git_katas

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git log --oneline
ca20aae (HEAD -> master) this is amend added mylib
31179fd files added
f4f79c1 sample
88f75ae (mybranch) file2 commit in branching
30ea3a2 mergetool commit
27407fc (mergesort-impl) mergesort-impl commit
59dfada master mergesort-impl
2b06c04 greeting conflict final
5d1225b (merge-conflict-branch1) greeting conflict in merge-conflict
875d70c greeting conflict in master
6fa1c70 Merge branch 'greeting'
9d562be 3 way merge Readme commit
21e9444 (greeting) greeting file in 3-way merge commit
90ecb13 greeting file commit
9ec038e file3 commit in branching
a27d98f first

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master)
$ git rebase -i HEAD~4
error: invalid line 5: latest commit
You can fix this with 'git rebase --edit-todo' and then run 'git rebase --cont
ue'.
Or you can abort the rebase with 'git rebase --abort'.

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git_katas (master|REBASE)
$ git log --oneline
30ea3a2 (HEAD) mergetool commit
27407fc (mergesort-impl) mergesort-impl commit
59dfada master mergesort-impl
2b06c04 greeting conflict final
5d1225b (merge-conflict-branch1) greeting conflict in merge-conflict
875d70c greeting conflict in master
6fa1c70 Merge branch 'greeting'
9d562be 3 way merge Readme commit
21e9444 (greeting) greeting file in 3-way merge commit
90ecb13 greeting file commit
9ec038e file3 commit in branching
a27d98f first

```

## Gitignore

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
$ touch foo.s

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
$ git status
On branch my_branch
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    foo.s

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

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
$ touch .gitignore

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
$ vi .gitignore

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
$ git status
On branch my_branch
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)

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
$ git commit -a -m "commit the gitignore"
On branch my_branch
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)

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
$ git status
On branch my_branch
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)

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
$ git add .
warning: LF will be replaced by CRLF in .gitignore.
The file will have its original line endings in your working directory

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
$ git commit -m "gitignore"
[my_branch f9c0400] gitignore
1 file changed, 1 insertion(+)
create mode 100644 .gitignore
```

```
[my_branch 15c0100] gitignore
1 file changed, 1 insertion(+)
create mode 100644 .gitignore

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
$ vi file1.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
$ git add .
warning: LF will be replaced by CRLF in file1.txt.
The file will have its original line endings in your working directory

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
$ git commit -m "commit file1"
[my_branch 6a402dc] commit file1
1 file changed, 1 insertion(+)
create mode 100644 file1.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
$ vi .gitignore

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
$ git status
On branch my_branch
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:   .gitignore

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

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
$ vi file1.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
$ git status
On branch my_branch
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:   .gitignore
        modified:   file1.txt

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

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
$ touch new_file1.txt

VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
$ git status
On branch my_branch
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:   .gitignore
        modified:   file1.txt
```

```
$ touch new_file1.txt
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
```

```
$ git status
```

```
On branch my_branch
```

```
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:   .gitignore
```

```
    modified:   file1.txt
```

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

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
```

```
$ git rm --cached
```

```
fatal: No pathspec was given. Which files should I remove?
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
```

```
$ git rm --cached file1.txt
```

```
rm 'file1.txt'
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
```

```
$ git status
```

```
On branch my_branch
```

```
Changes to be committed:
```

```
  (use "git restore --staged <file>..." to unstage)
```

```
    deleted:    file1.txt
```

```
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:   .gitignore
```

```
VISHNU@DESKTOP-P4F8HGU MINGW64 ~/desktop/git-katas (my_branch)
```

```
$ |
```