

# GIT BASIC COMMANDS

```
MINGW64/c/Users/dell/Desktop/hello-git
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop (master)
$ git config --list
diff.astextplain.textconv=astextplain
filter.lfs.clean=git-lfs clean -- %f
filter.lfs.smudge=git-lfs smudge -- %f
diff.astextplain.textconv=astextplain
filter.lfs.clean=git-lfs clean -- %f
filter.lfs.smudge=git-lfs smudge -- %f
filter.lfs.process=git-lfs filter-process
filter.lfs.required=true
http.sslbackend=openssl
http.sslcert=C:/Program Files/Git/mingw64/ssl/certs/ca-bundle.crt
core.autocrlf=true
core.fsmonitor=true
core.symlinks=false
credential.helper=manager-core
pull.rebase=false
credential.https://dev.azure.com.usehttppath=true
init.defaultbranch=master
filter.lfs.smudge=git-lfs smudge -- %f
filter.lfs.process=git-lfs filter-process
filter.lfs.required=true
filter.lfs.clean=git-lfs clean -- %f
user.name=Apoorva
user.email=vedangi.apoorva@accolitedigital.com
core.repositoryformatversion=0
core.filemode=false
core.bare=false

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop (master)
$

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop (master)
$ mkdir hello-git
mkdir: cannot create directory 'hello-git': File exists

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop (master)
$ mkdir hello-git

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop (master)
$ cd hello-git

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ vi hello.java

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ javac hello.java
```

```
MINGW64/c/Users/dell/Desktop/hello-git
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop (master)
$ cd hello-git

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ vi hello.java

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ javac hello.java

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ java hello.java
Hello world
```

## GIT ADD,GIT COMMIT AND GIT LOG

```
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git init
Initialized empty Git repository in C:/Users/dell/Desktop/hello-git/.git/

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git status
On branch master

No commits yet

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

```
(use "git add <file>..." to include in what will be committed)
  hello.class
  hello.java

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

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ vi readme.md

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    hello.class
    hello.java
    readme.md

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

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git add hello.java
warning: LF will be replaced by CRLF in hello.java.
The file will have its original line endings in your working directory

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git add readme.md
warning: LF will be replaced by CRLF in readme.md.
The file will have its original line endings in your working directory

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   hello.java
    new file:   readme.md

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

```
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git git commit -m "first commit"
git: 'git' is not a git command. See 'git --help'.

The most similar command is
    init

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git commit -m "first commit"
[master (root-commit) fe996b9] first commit
 2 files changed, 9 insertions(+)
 create mode 100644 hello.java
 create mode 100644 readme.md

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        hello.class

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

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git log
commit fe996b9aadaa5ea9dff688e61c5c82b11ce029eb (HEAD -> master)
Author: Apoorva <vedangi.apoorva@accolitedigital.com>
Date:   Sat Jan 9 17:00:29 2021 +0530

    first commit

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git log --oneline
fe996b9 (HEAD -> master) first commit

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git log --stat
commit fe996b9aadaa5ea9dff688e61c5c82b11ce029eb (HEAD -> master)
Author: Apoorva <vedangi.apoorva@accolitedigital.com>
Date:   Sat Jan 9 17:00:29 2021 +0530

    first commit

hello.java | 8 ++++++++
readme.md  | 1 +
2 files changed, 9 insertions(+)
```

## GIT DIFF AND GIT DIFF --STAGED

```
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (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:   hello.java

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

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

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git diff
warning: LF will be replaced by CRLF in hello.java.
The file will have its original line endings in your working directory
diff --git a/hello.java b/hello.java
index 9f90c4b..dcb7d60 100644
--- a/hello.java
+++ b/hello.java
@@ -3,6 +3,7 @@ class hello
    public static void main(String[] args)
    {
        System.out.println("Hello world");
+       System.out.println("World hello");
    }
}

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git add hello.java
warning: LF will be replaced by CRLF in hello.java.
The file will have its original line endings in your working directory

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   hello.java

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

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
```

MINGW64 ~/C:/Users/dell/Desktop/hello-git

```
$ git diff
```

```
hell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
```

```
$ git dif --staged
```

```
git: 'dif' is not a git command. See 'git --help'.
```

```
The most similar commands are
```

```
diff
config
difftool
init
```

```
hell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
```

```
$ git diff --staged
```

```
diff --git a/hello.java b/hello.java
```

```
index 9f90c4b..dcb7d60 100644
```

```
--- a/hello.java
```

```
+++ b/hello.java
```

```
@@ -3,6 +3,7 @@ class hello
    public static void main(String[] args)
    {
        System.out.println("Hello world");
+       System.out.println("World hello");
    }
}
```

```
hell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
```

```
$ git commit -m "second commit"
```

```
[master 34c9a69] second commit
```

```
1 file changed, 1 insertion(+)
```

```
hell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
```

```
$
```

```
hell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
```

```
$ git status
```

```
On branch master
```

```
Untracked files:
```

```
(use "git add <file>..." to include in what will be committed)
```

```
hello.class
```

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

```
hell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
```

```
$ git diff --stats
```

```
error: invalid option: --stats
```

```
hell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
```

```
$ git diff--staged
```

```
git: 'diff--staged' is not a git command. See 'git --help'.
```

```
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git diff --staged
```

```
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git log
commit 34c9a6923230ac1599d3961c88becd6b0c48cde4 (HEAD -> master)
Author: Apoorva <vedangi.apoorva@accolitedigital.com>
Date: Sat Jan 9 17:03:27 2021 +0530
```

second commit

```
commit fe996b9aadaa5ea9dff688e61c5c82b11ce029eb
Author: Apoorva <vedangi.apoorva@accolitedigital.com>
Date: Sat Jan 9 17:00:29 2021 +0530
```

first commit

```
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git log -p -1
commit 34c9a6923230ac1599d3961c88becd6b0c48cde4 (HEAD -> master)
Author: Apoorva <vedangi.apoorva@accolitedigital.com>
Date: Sat Jan 9 17:03:27 2021 +0530
```

second commit

```
diff --git a/hello.java b/hello.java
index 9f90c4b..dcb7d60 100644
--- a/hello.java
+++ b/hello.java
@@ -3,6 +3,7 @@ class hello
     public static void main(String[] args)
     {
+        System.out.println("Hello world");
+        System.out.println("World hello");
     }
 }
```

```
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    hello.class
```

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

```
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
```

## .GITIGNORE

```
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        hello.class

nothing added to commit but untracked files present (use "git add" to track)
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
```

```
$ vi .gitignore

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (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)

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git add .gitignore
warning: LF will be replaced by CRLF in .gitignore.
The file will have its original line endings in your working directory

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git commit -m "third commit"
[master 06ee98d] third commit
1 file changed, 5 insertions(+)
create mode 100644 .gitignore
```

## PUSHING TO REMOTE REPOSITORY

```
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git remote add origin "https://github.com/ApoorvaV216/hello-git"

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git remote -v
origin https://github.com/ApoorvaV216/hello-git (fetch)
origin https://github.com/ApoorvaV216/hello-git (push)

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git push origin master
Enumerating objects: 10, done.
Counting objects: 100% (10/10), done.
Delta compression using up to 4 threads
Compressing objects: 100% (8/8), done.
Writing objects: 100% (10/10), 972 bytes | 324.00 KiB/s, done.
Total 10 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), done.
To https://github.com/ApoorvaV216/hello-git
* [new branch]      master -> master
```

github.com/ApoorvaV216/hello-git

Read the guide

ApoorvaV216 / hello-git

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master 1 branch 0 tags

Go to file Add file Code

Apoorva third commit 06ee98d 4 minutes ago 3 commits

.gitignore	third commit	4 minutes ago
hello.java	second commit	8 minutes ago
readme.md	first commit	11 minutes ago

readme.md

This is the readme file for hello.java

About

my first assignment in accolite

Readme

Releases

No releases published

Create a new release

Packages

Activate Windows

Go to Settings to activate Windows.

No packages published

Publish your first package

github.com/ApoorvaV216/hello-git/blob/master/hello.java

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master hello-git / hello.java / <> Jump to

Go to file

Apoorva second commit Latest commit 34c9a69 9 minutes ago History

0 contributors

9 lines (8 sloc) 137 Bytes

Raw Blame

```
1 class hello
2 {
3     public static void main(String[] args)
4     {
5         System.out.println("Hello world");
6         System.out.println("World hello");
7     }
8 }
9
```



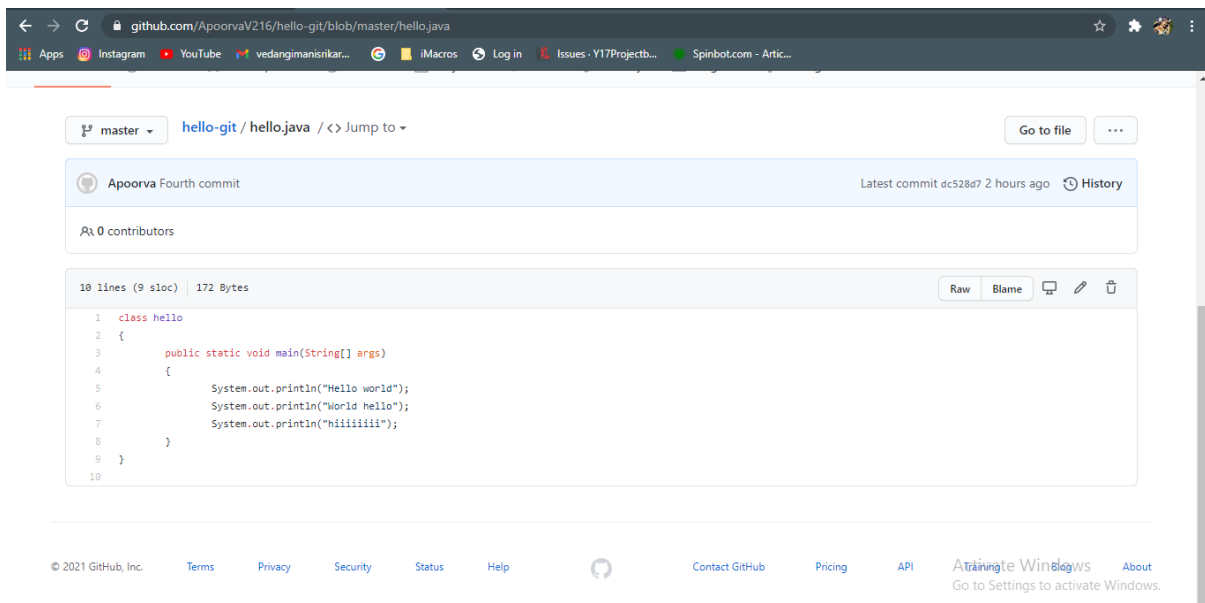
## CHANGING CONTENTS OF FILE AND PUSHING INTO REMOTE REPOSITORY

```
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ vi hello.java

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git add hello.java
warning: LF will be replaced by CRLF in hello.java.
The file will have its original line endings in your working directory

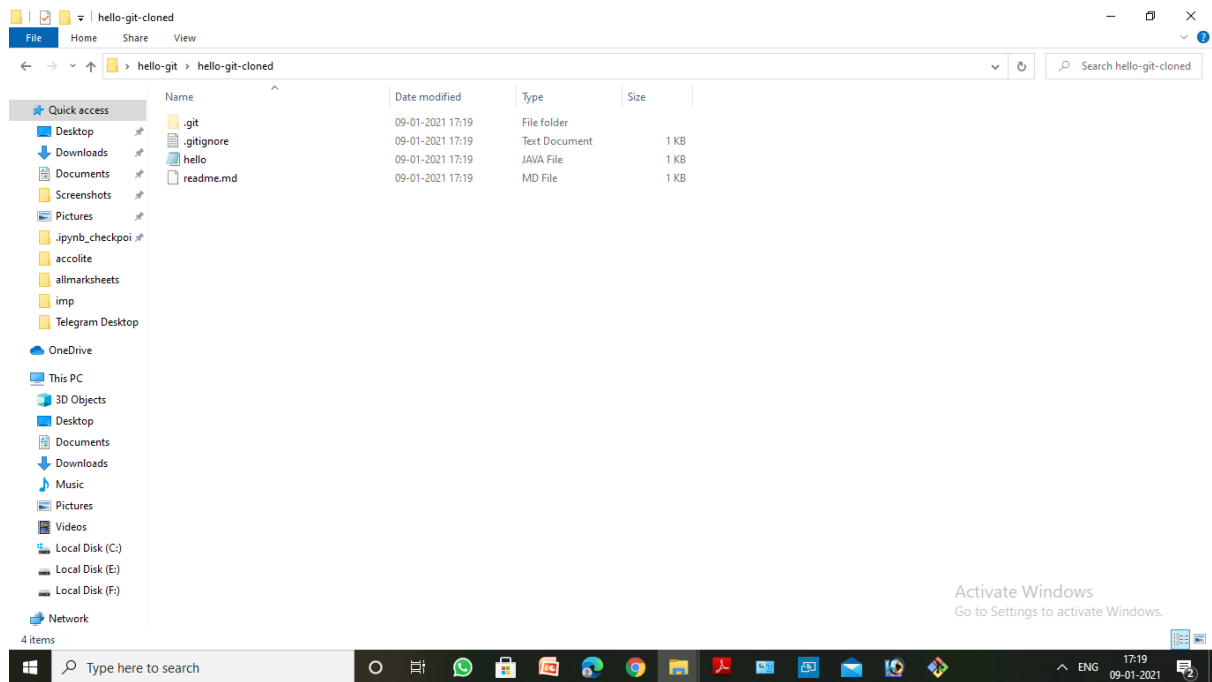
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git commit -m "Fourth commit"
[master dc528d7] Fourth commit
1 file changed, 1 insertion(+)

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git push origin master
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 362 bytes | 362.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/ApoorvaV216/hello-git
06ee98d..dc528d7 master -> master
```



## CLONING A PROJECT INTO WORKING DIRECTORY

```
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git clone "https://github.com/ApoorvaV216/hello-git" hello-git-cloned
Cloning into 'hello-git-cloned'...
remote: Enumerating objects: 13, done.
remote: Counting objects: 100% (13/13), done.
remote: Compressing objects: 100% (9/9), done.
remote: Total 13 (delta 2), reused 13 (delta 2), pack-reused 0
Receiving objects: 100% (13/13), done.
Resolving deltas: 100% (2/2), done.
```



## GIT TAG

```
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git tag -a v1.0.0 -m "First production system"

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git tag
v1.0.0

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git show v1.0.0
tag v1.0.0
Tagger: Apoorva <vedangi.apoorva@accolitedigital.com>
tag v1.0.0
Tagger: Apoorva <vedangi.apoorva@accolitedigital.com>
Date: Sat Jan 9 17:21:00 2021 +0530

First production system

commit dc528d72eee0f2b2a1b111554cdedf23f8a3fb53 (HEAD -> master, tag: v1.0.0, or
igin/master)
Author: Apoorva <vedangi.apoorva@accolitedigital.com>
Date: Sat Jan 9 17:13:32 2021 +0530

    Fourth commit

diff --git a/hello.java b/hello.java
index dcb7d60..13da877 100644
--- a/hello.java
```

```
commit dc528d72eee0f2b2a1b111554cdedf23f8a3fb53 (HEAD -> master, tag: v1.0.0, or  
igin/master)
```

```
Author: Apoorva <vedangi.apoorva@accolitedigital.com>
```

```
Date: Sat Jan 9 17:13:32 2021 +0530
```

Fourth commit

```
diff --git a/hello.java b/hello.java
```

```
index dcb7d60..13da877 100644
```

```
--- a/hello.java
```

```
+++ b/hello.java
```

```
@@ -4,6 +4,7 @@ class hello
```

```
{  
    System.out.println("Hello world");  
    System.out.println("World hello");  
+    System.out.println("hiiiiiii");  
}
```

```
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
```

```
$ git log
```

```
commit dc528d72eee0f2b2a1b111554cdedf23f8a3fb53 (HEAD -> master, tag: v1.0.0, or
```

```
commit dc528d72eee0f2b2a1b111554cdedf23f8a3fb53 (HEAD -> master, tag: v1.0.0, or  
igin/master)
```

```
Author: Apoorva <vedangi.apoorva@accolitedigital.com>
```

```
Date: Sat Jan 9 17:13:32 2021 +0530
```

Fourth commit

```
commit 06ee98d820ae8449219dfb96d553cc7079703924
```

```
Author: Apoorva <vedangi.apoorva@accolitedigital.com>
```

```
Date: Sat Jan 9 17:07:44 2021 +0530
```

third commit

```
commit 34c9a6923230ac1599d3961c88becd6b0c48cde4
```

```
Author: Apoorva <vedangi.apoorva@accolitedigital.com>
```

```
Date: Sat Jan 9 17:03:27 2021 +0530
```

second commit

```
commit fe996b9aadaa5ea9dff688e61c5c82b11ce029eb
```

```
Author: Apoorva <vedangi.apoorva@accolitedigital.com>
```

```
Date: Sat Jan 9 17:00:29 2021 +0530
```

```
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
```

```
$ git tag -a "v2.0.0" -m "Second production" fe996b9aadaa5ea9dff688e61c5c82b11ce  
029eb
```

```

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git tag
v1.0.0
v2.0.0

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git show v2.0.0
tag v2.0.0
Tagger: Apoorva <vedangi.apoorva@accolitedigital.com>
Date: Sat Jan 9 17:23:00 2021 +0530

Second production

commit fe996b9aadaa5ea9dff688e61c5c82b11ce029eb (tag: v2.0.0)
Author: Apoorva <vedangi.apoorva@accolitedigital.com>
Date: Sat Jan 9 17:00:29 2021 +0530

tag v2.0.0
Tagger: Apoorva <vedangi.apoorva@accolitedigital.com>
Date: Sat Jan 9 17:23:00 2021 +0530

Second production

commit fe996b9aadaa5ea9dff688e61c5c82b11ce029eb (tag: v2.0.0)
Author: Apoorva <vedangi.apoorva@accolitedigital.com>
Date: Sat Jan 9 17:00:29 2021 +0530

first commit

diff --git a/hello.java b/hello.java
new file mode 100644
index 0000000..9f90c4b
--- /dev/null
+++ b/hello.java
@@ -0,0 +1,8 @@
+class hello
+{
+    public static void main(String[] args)
+    {
+        System.out.println("Hello world");
+    }
+}

```

## BRANCHING

```

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git init
Reinitialized existing Git repository in C:/Users/dell/Desktop/hello-git/.git/

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
$ git add readme.md

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)

```

✓ `mkdir -p C:/Users/dell/Desktop/hello-git/apoorva`

```
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
git rm readme.md
rm 'readme.md'

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
ls
hello-git-cloned/  hello.class  hello.java

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
vi readme.md

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
git add readme.md
warning: LF will be replaced by CRLF in readme.md.
the file will have its original line endings in your working directory

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
mkdir apoorva

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git (master)
cd apoorva

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
vi readme.md

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
git init
initialized empty Git repository in C:/Users/dell/Desktop/hello-git/apoorva/.git

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
git status
on branch master

no commits yet

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)

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
git add readme.md
warning: LF will be replaced by CRLF in readme.md.
the file will have its original line endings in your working directory

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
git commit "Commit 1"
```

```
[master (root-commit) 830dc3d] Commit 1
1 file changed, 1 insertion(+)
create mode 100644 readme.md

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ vi readme.md

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ git add readme.md
warning: LF will be replaced by CRLF in readme.md.
The file will have its original line endings in your working directory

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ git commit -m "Commit 2"
[master 3d6f39b] Commit 2
1 file changed, 1 insertion(+)

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ vi readme.md

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ git add readme.md
warning: LF will be replaced by CRLF in readme.md.
The file will have its original line endings in your working directory

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ git commit -m "Commit 3"
[master bc55cf3] Commit 3
1 file changed, 1 insertion(+)

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ git log --oneline
bc55cf3 (HEAD -> master) Commit 3
3d6f39b Commit 2
830dc3d Commit 1

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ git branch devel

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ git checkout devel
Switched to branch 'devel'

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (devel)
$ git status
On branch devel
nothing to commit, working tree clean

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (devel)
$ vi readme.md
```

```

$ vi readme.md

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (devel)
$ git add readme.md
warning: LF will be replaced by CRLF in readme.md.
The file will have its original line endings in your working directory

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (devel)
$ git commit -m "Commit 4"
[devel 4da2d01] Commit 4
1 file changed, 1 insertion(+)

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (devel)
$ git log --oneline
4da2d01 (HEAD -> devel) Commit 4
bc55cf3 (master) Commit 3
3d6f39b Commit 2
830dc3d Commit 1

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (devel)

```

## FAST FORWARD LINEAR MERGE

```

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (devel)
$ git checkout master
Switched to branch 'master'

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ git log --oneline
bc55cf3 (HEAD -> master) Commit 3
3d6f39b Commit 2
830dc3d Commit 1

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ vi readme.md

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ git add readme.md

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ git commit -m "Commit 5"
[master 39f24a5] Commit 5
1 file changed, 1 insertion(+)

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ git log --oneline
39f24a5 (HEAD -> master) Commit 5
bc55cf3 Commit 3
3d6f39b Commit 2
830dc3d Commit 1

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ git reset --hard HEAD~1
HEAD is now at bc55cf3 Commit 3

```

```

HEAD is now at bc55cf3 Commit 3

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ git log --oneline
bc55cf3 (HEAD -> master) Commit 3
3d6f39b Commit 2
830dc3d Commit 1

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ git merge devel
Updating bc55cf3..4da2d01
Fast-forward
 readme.md | 1 +
 1 file changed, 1 insertion(+)

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ git log --oneline
4da2d01 (HEAD -> master, devel) Commit 4
bc55cf3 Commit 3
3d6f39b Commit 2
830dc3d Commit 1

```

### 3-WAY MERGE

```

HEAD is now at bc55cf3 Commit 3

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ git log --oneline
bc55cf3 (HEAD -> master) Commit 3
3d6f39b Commit 2
830dc3d Commit 1

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ git merge devel
Updating bc55cf3..4da2d01
Fast-forward
 readme.md | 1 +
 1 file changed, 1 insertion(+)

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ git log --oneline
4da2d01 (HEAD -> master, devel) Commit 4
bc55cf3 Commit 3
3d6f39b Commit 2
830dc3d Commit 1

```



```
dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (devel)
$ git reset --hard HEAD~1
HEAD is now at bc55cf3 Commit 3

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (devel)
$ vi readme.md

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (devel)
$ git add readme.md

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (devel)
$ git commit -m "Commit 4"
[devel 6811f9f] Commit 4
1 file changed, 1 insertion(+), 1 deletion(-)

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (devel)
$ git checkout master
Switched to branch 'master'

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master)
$ git merge devel
Auto-merging readme.md
CONFLICT (content): Merge conflict in readme.md
Automatic merge failed; fix conflicts and then commit the result.

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master|MERGING)
$ git status
On branch master
You have unmerged paths.
  (fix conflicts and run "git commit")
  (use "git merge --abort" to abort the merge)

Unmerged paths:
  (use "git add <file>..." to mark resolution)
        both modified:   readme.md

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

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master|MERGING)
$ vi readme.md

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master|MERGING)
$ git add readme
fatal: pathspec 'readme' did not match any files

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master|MERGING)
$ git add readme.md

dell@DESKTOP-0V4VLF9 MINGW64 ~/Desktop/hello-git/apoorva (master|MERGING)
```