

List of files in my Directory

```
chelvankn@chelman-kn MINGW64 ~/hellokn (master)
```

```
$ ls
Hello.java  Hello2.java  README.md  sam.txt
```

Already added the hello.java and README.md in git
(ignore) sam.txt is a temp file

1. Git add

Creating a new file hello2.java and adding to git

```
chelvankn@chelman-kn MINGW64 ~/hellokn (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        Hello2.java
        sam.txt

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

chelvankn@chelman-kn MINGW64 ~/hellokn (master)
$ git add Hello2.java

chelvankn@chelman-kn MINGW64 ~/hellokn (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   Hello2.java

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

2. Git rm

Deleted the Hello2.java and removed from git using rm command.

```
chelvankn@chelman-kn MINGW64 ~/hellokn (master)
$ ls
Hello.java  README.md  sam.txt

chelvankn@chelman-kn MINGW64 ~/hellokn (master)
$ git rm Hello2.java
rm 'Hello2.java'

chelvankn@chelman-kn MINGW64 ~/hellokn (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        sam.txt

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

chelvankn@chelman-kn MINGW64 ~/hellokn (master)
$ git log
commit a5e488415553dff30dc6aee40eed4b66c2c52df3 (HEAD -> master, origin/master)
Author: kalaichelvan-kn <kalaichelvan294@gmail.com>
Date:   Wed Jan 6 16:23:30 2021 +0530

    Initial commit

chelvankn@chelman-kn MINGW64 ~/hellokn (master)
$ git commit -m "after rm"
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        sam.txt

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

chelvankn@chelman-kn MINGW64 ~/hellokn (master)
```

3. Git mv

Renamed rename.temp to renameNew.temp, applied to git using mv command

```

chelvankn@chelvan-kn MINGW64 ~/hellokn (master)
$ ls
Hello.java  README.md  rename.temp  sam.txt

chelvankn@chelvan-kn MINGW64 ~/hellokn (master)
$ git mv rename.temp renameNew.temp

chelvankn@chelvan-kn MINGW64 ~/hellokn (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        renamed:    rename.temp -> renameNew.temp

chelvankn@chelvan-kn MINGW64 ~/hellokn (master)
$ git add *
The following paths are ignored by one of your .gitignore files:
sam.txt
hint: Use -f if you really want to add them.
hint: Turn this message off by running
hint: "git config advice.addIgnoredFile false"

```

Added to git and committed.

4. Git diff

Added a new comment line in hello.java file

```

chelvankn@chelvan-kn MINGW64 ~/hellokn (master)
$ git diff
diff --git a/Hello.java b/Hello.java
index bba0572..76b3347 100644
--- a/Hello.java
+++ b/Hello.java
@@ -1,5 +1,6 @@
 public class Hello {
     public static void main(String[] args) {
         System.out.println("Hello, world from GIT!");
+        // altered
     }
 }
\ No newline at end of file

chelvankn@chelvan-kn MINGW64 ~/hellokn (master)
$ |

```

5. Git tag

Added a tag at last for major release point

```

chelvankn@chelvan-kn MINGW64 ~/hellokn (master)
$ git tag -a v1.0.0 -m "Intial hello.java"

chelvankn@chelvan-kn MINGW64 ~/hellokn (master)
$ git tag
v1.0.0

chelvankn@chelvan-kn MINGW64 ~/hellokn (master)
$ git show v1.0.0
tag v1.0.0
Tagger: kalaichelvan-kn <kalaichelvan294@gmail.com>
Date:   Wed Jan 6 20:19:11 2021 +0530

Intial hello.java

commit 45f1ecef7f89a7c892249ec81f0b437335f12f1e (HEAD -> master, tag: v1.0.0)
Author: kalaichelvan-kn <kalaichelvan294@gmail.com>
Date:   Wed Jan 6 19:54:07 2021 +0530

    new file rename

diff --git a/rename.temp b/rename.temp
new file mode 100644
index 0000000..e69de29

chelvankn@chelvan-kn MINGW64 ~/hellokn (master)
$ |

```

Fork and clone with /SAU-2021-Jan-Batch-Hyderabad

```
chelvankn@chelman-kn MINGW64 /k/accolite/AccoliteGit
$ git clone https://github.com/kalaichelvan-kn/SAU-2021-Jan-Batch-Hyderabad
Cloning into 'SAU-2021-Jan-Batch-Hyderabad'...
remote: Enumerating objects: 6, done.
remote: Counting objects: 100% (6/6), done.
remote: Compressing objects: 100% (4/4), done.
remote: Total 6 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (6/6), done.

chelvankn@chelman-kn MINGW64 /k/accolite/AccoliteGit
$ cd SAU-2021-Jan-Batch-Hyderabad/

chelvankn@chelman-kn MINGW64 /k/accolite/AccoliteGit/SAU-2021-Jan-Batch-Hyderabad (main)
$ |
```

Committed the changes and pushed into cloned repo.

```
new file:   Version Control System GIT - Afternoon/Screenshots/clone.png
new file:   Version Control System GIT - Afternoon/Screenshots/diff.png
new file:   Version Control System GIT - Afternoon/Screenshots/mv.png
new file:   Version Control System GIT - Afternoon/Screenshots/rm.png
new file:   Version Control System GIT - Afternoon/Screenshots/tag.png

chelvankn@chelman-kn MINGW64 /k/accolite/AccoliteGit/SAU-2021-Jan-Batch-Hyderabad (main)
$ git commit -m "GIT Assignment initial commit"
[main 1e62b4d] GIT Assignment initial commit
7 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 Version Control System GIT - Afternoon/GitAssignment.pdf
create mode 100644 Version Control System GIT - Afternoon/Screenshots/add.png
create mode 100644 Version Control System GIT - Afternoon/Screenshots/clone.png
create mode 100644 Version Control System GIT - Afternoon/Screenshots/diff.png
create mode 100644 Version Control System GIT - Afternoon/Screenshots/mv.png
create mode 100644 Version Control System GIT - Afternoon/Screenshots/rm.png
create mode 100644 Version Control System GIT - Afternoon/Screenshots/tag.png

chelvankn@chelman-kn MINGW64 /k/accolite/AccoliteGit/SAU-2021-Jan-Batch-Hyderabad (main)
$ git push origin main
Enumerating objects: 12, done.
Counting objects: 100% (12/12), done.
Delta compression using up to 4 threads
Compressing objects: 100% (11/11), done.
Writing objects: 100% (11/11), 296.45 KiB | 10.98 MiB/s, done.
Total 11 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/kalaichelvan-kn/SAU-2021-Jan-Batch-Hyderabad
 3858cd6..1e62b4d  main -> main

chelvankn@chelman-kn MINGW64 /k/accolite/AccoliteGit/SAU-2021-Jan-Batch-Hyderabad (main)
$ |
```

6. Git reset

```

chelvankn@chelvan-kn MINGW64 ~/helloworld (master)
$ git log
commit 5d2b71d23f2a16e8dc706cee46edd1a0af988a8e (HEAD -> master, origin/master)
Author: kalaichelvan-kn <kalaichelvan294@gmail.com>
Date:   Fri Jan 8 08:03:33 2021 +0530

    commit - 2

commit dc1a1c927c3dab9f1f6d0e0eb2110efde8105f9f
Author: kalaichelvan-kn <kalaichelvan294@gmail.com>
Date:   Fri Jan 8 08:02:47 2021 +0530

    commit - 1

commit 45f1ecef7f89a7c892249ec81f0b437335f12f1e (tag: v1.0.0)
Author: kalaichelvan-kn <kalaichelvan294@gmail.com>
Date:   Wed Jan 6 19:54:07 2021 +0530

    new file rename

chelvankn@chelvan-kn MINGW64 ~/helloworld (master)
$ git reset --soft 45f1ecef7f89a7c892249ec81f0b437335f12f1e

chelvankn@chelvan-kn MINGW64 ~/helloworld (master)
$ git log
commit 45f1ecef7f89a7c892249ec81f0b437335f12f1e (HEAD -> master, tag: v1.0.0)
Author: kalaichelvan-kn <kalaichelvan294@gmail.com>
Date:   Wed Jan 6 19:54:07 2021 +0530

    new file rename

commit 6ca6adf26e67e135633dd43388b6076dec106ea6
Author: kalaichelvan-kn <kalaichelvan294@gmail.com>
Date:   Wed Jan 6 19:52:00 2021 +0530

    after rm

commit a5e488415553dff30dc6aee40eed4b66c2c52df3
Author: kalaichelvan-kn <kalaichelvan294@gmail.com>
Date:   Wed Jan 6 16:23:30 2021 +0530

    Initial commit

chelvankn@chelvan-kn MINGW64 ~/helloworld (master)

```

Git merge conflicts

```

chelvankn@chelvan-kn MINGW64 ~/helloworld (feature/kalai1|MERGING)
$ git merge
fatal: You have not concluded your merge (MERGE_HEAD exists).
Please, commit your changes before you merge.

chelvankn@chelvan-kn MINGW64 ~/helloworld (feature/kalai1|MERGING)
$ git commit -m "conflicts merged commit"
[feature/kalai1 be4dd85] conflicts merged commit

chelvankn@chelvan-kn MINGW64 ~/helloworld (feature/kalai1)
$ git pull origin master
From https://github.com/kalaichelvan-kn/helloworld
* branch      master      -> FETCH_HEAD
Already up to date.

chelvankn@chelvan-kn MINGW64 ~/helloworld (feature/kalai1)
$ |

```