

1. Create a directory 'project_dir' & cd to 'project_dir'.
2. Initialize git version database. (git init)
3. Create a new file index.html.
4. Check the git status. You should find index.html as untracked file.
5. Stage the index.html file.
6. Commit index.html

```
MINGW64/c/Users/AMALLU/Git/project_dir
amallu@LIN33005500 MINGW64 ~/Git
$ mkdir project_dir

amallu@LIN33005500 MINGW64 ~/Git
$ cd project_dir

amallu@LIN33005500 MINGW64 ~/Git/project_dir
$ git init
Initialized empty Git repository in C:/Users/AMALLU/Git/project_dir/.git/

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ touch index.html

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ git status
On branch master

No commits yet

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

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

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ git add .

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ git commit -m "Created a file index.html and committed to git"
[master (root-commit) 6a34d5b] Created a file index.html and committed to git
Committer: Mallu <ashok.mallu@capgemini.com>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:
    git config --global --edit
After doing this, you may fix the identity used for this commit with:
    git commit --amend --reset-author

1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 index.html
```

7. Make few changes in index.html & create a new file info.txt file.
8. Check git status. You should find index.html & info.txt as untracked files.
9. Configure GIT to ignore all txt files.
10. Again check the git status. You should find only index.html as untracked file.
11. State & commit index.html
12. Log all your comments so far.

```
MINGW64/c/Users/AMALLU/Git/project_dir
amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ touch info.txt

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        info.txt

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

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ vi index.html

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ cat index.html
This is sample file
This is sample file
This is sample file
This is sample file
This is sample file
This is sample file

amallu@LIN33005500 MINGW64 ~/Git/project_dir (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:   index.html

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

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

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ touch .gitignore

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ vi .gitignore

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ cat .gitignore
info.txt

amallu@LIN33005500 MINGW64 ~/Git/project_dir (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:   index.html

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

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

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ git add index.html
warning: LF will be replaced by CRLF in index.html.
The file will have its original line endings in your working directory

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ git commit -m "updated indexhtml file"
[master afeaae8] updated indexhtml file
Committer: Mallu <ashok.mallu@capgemini.com>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

    git config --global --edit

After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author

1 file changed, 6 insertions(+)

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ git log
commit afeaae84b97cd90c0ca3f161ccf9f903f289aa9f (HEAD -> master)
Author: Mallu <ashok.mallu@capgemini.com>
Date:   Thu Oct 21 18:03:55 2021 +0530

    updated indexhtml file

commit 6a34d5b3e4f6fb03a357560a12c6ff05ba2b6de9
Author: Mallu <ashok.mallu@capgemini.com>
Date:   Thu Oct 21 17:33:12 2021 +0530
```

13. Make some changes in index.html.
14. Revert the change made in the previous step using git command.

15. Again change index.html.

```
MINGW64~/c/Users/AMALLU/Git/project_dir

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ git checkout -- .

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ ls -lrt
total 1
-rw-r--r-- 1 amallu 1049089  0 Oct 21 17:52 info.txt
-rw-r--r-- 1 amallu 1049089 120 Oct 21 17:56 index.html

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ vi index.html

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ cat index.html
This is sample file
This is sample file
This is sample file
This is sample file
This is sample file
This is sample file
This is newly added line
And yes i am modified

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ git add index.html
warning: LF will be replaced by CRLF in index.html.
The file will have its original line endings in your working directory

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ git revert HEAD index.html
fatal: bad revision 'index.html'

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ git reset HEAD index.html
Unstaged changes after reset:
M   index.html

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ cat index.html
This is sample file
This is sample file
This is sample file
This is sample file
This is sample file
This is sample file
This is newly added line
And yes i am modified
```

17. Revert back the last stage.
18. Rename 'add' command to 'my-add'.
19. Using my_add command Stage index.html again & commit the changes.
20. Revert the last commit.

```
amallu@LIN33005500 MINGW64 ~/Git/project_dir (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:   index.html

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

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

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ git config --global alias.new-add add

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ git new-add index.html
warning: LF will be replaced by CRLF in index.html.
The file will have its original line endings in your working directory

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ git commit -m "Modified index.html at stage2"
[master 4d8c7e8] Modified index.html at stage2
Committer: Mallu <ashok.mallu@cappemini.com>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly:

    git config --global user.name "Your Name"
    git config --global user.email you@example.com

After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author

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

```
amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ git log
commit 4d8c7e8fa58800076eb75571e964caeba9ab600e (HEAD -> master)
Author: Mallu <ashok.mallu@capgemini.com>
Date: Thu Oct 21 18:13:38 2021 +0530

    Modified index.html at stage2

commit afe8ae84b97cd90c0ca3f161ccf9f903f289aa9f
Author: Mallu <ashok.mallu@capgemini.com>
Date: Thu Oct 21 18:03:55 2021 +0530

    updated indexhtml file

commit 6a34d5b3e4f6fb03a357560a12c6ff05ba2b6de9
Author: Mallu <ashok.mallu@capgemini.com>
Date: Thu Oct 21 17:33:12 2021 +0530

    Created a file index.html and committed to git

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ git reset -soft HEAD^
error: did you mean '--soft' (with two dashes)?

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ git reset --soft HEAD^

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$ git log
commit afe8ae84b97cd90c0ca3f161ccf9f903f289aa9f (HEAD -> master)
Author: Mallu <ashok.mallu@capgemini.com>
Date: Thu Oct 21 18:03:55 2021 +0530

    updated indexhtml file

commit 6a34d5b3e4f6fb03a357560a12c6ff05ba2b6de9
Author: Mallu <ashok.mallu@capgemini.com>
Date: Thu Oct 21 17:33:12 2021 +0530

    Created a file index.html and committed to git

amallu@LIN33005500 MINGW64 ~/Git/project_dir (master)
$
```