

Install GIT & make sure it is added into PATH.

Section 0 -Use GIT as local VCS. Steps to follow:

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/pbagmare/project_dir

pbagmare@LIN24009753 MINGW64 ~
$ mkdir project_dir

pbagmare@LIN24009753 MINGW64 ~
$ cd project_dir

pbagmare@LIN24009753 MINGW64 ~/project_dir
$ git init
Initialized empty Git repository in C:/Users/pbagmare/project_dir/.git/

pbagmare@LIN24009753 MINGW64 ~/project_dir (master)
$ touch index.html

pbagmare@LIN24009753 MINGW64 ~/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)

pbagmare@LIN24009753 MINGW64 ~/project_dir (master)
$ git add index.html

pbagmare@LIN24009753 MINGW64 ~/project_dir (master)
$ git commit -m "index.html committed"
[master (root-commit) ba4f024] index.html committed
Committer: Bagmare <prathmesh.bagmare@caggemini.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

pbagmare@LIN24009753 MINGW64 ~/project_dir (master)
```

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. Stage & commit index.html

```
MINGW64/c/Users/pbagmare/project_dir
pbagmare@LIN24009753 MINGW64 ~/project_dir (master)
$ touch info.txt

pbagmare@LIN24009753 MINGW64 ~/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")

pbagmare@LIN24009753 MINGW64 ~/project_dir (master)
$ touch .gitignore

pbagmare@LIN24009753 MINGW64 ~/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")

pbagmare@LIN24009753 MINGW64 ~/project_dir (master)
$ git add index.html

pbagmare@LIN24009753 MINGW64 ~/project_dir (master)
$ git commit -m "update index.html with html tags"
[master 2d2e7ac] update index.html with html tags
Committer: Bagemare <prathmesh.bagemare@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
```

12. Log all your comments so far.
13. Make some changes in index.html.
14. Revert the change made in the previous step using git command.
15. Again change index.html.
16. Stage index.html
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.

```
pbagmare@LIN24009753 MINGW64 ~/project_dir (master)
$ git log
commit 2d2e7ac613f934be164016bad4856a61e58c2eae (HEAD -> master)
Author: Bagmare <prathmesh.bagmare@capgemini.com>
Date: Sat Jan 15 10:10:18 2022 +0530

    update index.html with html tags

commit ba4f024fb9049e26f7d56a518aad1ac8e27092fe
Author: Bagmare <prathmesh.bagmare@capgemini.com>
Date: Sat Jan 15 09:43:44 2022 +0530

    index.html committed

pbagmare@LIN24009753 MINGW64 ~/project_dir (master)
$ git checkout -- .

pbagmare@LIN24009753 MINGW64 ~/project_dir (master)
$ git add index.html

pbagmare@LIN24009753 MINGW64 ~/project_dir (master)
$ git restore --staged index.html

pbagmare@LIN24009753 MINGW64 ~/project_dir (master)
$ git config alias.my-add add

pbagmare@LIN24009753 MINGW64 ~/project_dir (master)
$ git my-add index.html
```

19. Using my_add command Stage index.html again & commit the changes.
20. Revert the last commit.


```
pbagmare@LIN24009753 MINGW64 ~/project_dir (master)
$ git commit -m "staged using my-add and committed"
[master c28224a] staged using my-add and committed
Committer: Bagmare <prathmesh.bagmare@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, 1 insertion(+)
```

 MINGW64: c:/Users/pbagmare/project_dir

```
pbagmare@LIN24009753 MINGW64 ~/project_dir (master)
$ git log
commit c28224af0e31032530b5742c38475bf487f9c7db (HEAD -> master)
Author: Bagmare <prathmesh.bagmare@capgemini.com>
Date: Sat Jan 15 10:43:48 2022 +0530
```

```
staged using my-add and committed
```

```
commit 2d2e7ac613f934be164016bad4856a61e58c2eae
Author: Bagmare <prathmesh.bagmare@capgemini.com>
Date: Sat Jan 15 10:10:18 2022 +0530
```

```
update index.html with html tags
```

```
commit ba4f024fb9049e26f7d56a518aad1ac8e27092fe
Author: Bagmare <prathmesh.bagmare@capgemini.com>
Date: Sat Jan 15 09:43:44 2022 +0530
```

```
index.html committed
```

```
pbagmare@LIN24009753 MINGW64 ~/project_dir (master)
$ git reset --soft HEAD~1
```

```
pbagmare@LIN24009753 MINGW64 ~/project_dir (master)
$ git log
commit 2d2e7ac613f934be164016bad4856a61e58c2eae (HEAD -> master)
Author: Bagmare <prathmesh.bagmare@capgemini.com>
Date: Sat Jan 15 10:10:18 2022 +0530
```

```
update index.html with html tags
```

```
commit ba4f024fb9049e26f7d56a518aad1ac8e27092fe
Author: Bagmare <prathmesh.bagmare@capgemini.com>
Date: Sat Jan 15 09:43:44 2022 +0530
```

```
index.html committed
```