

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/Admin/project_dir
Admin@DESKTOP-07H2PR9 MINGW64 ~ (master)
$ mkdir project_dir
Admin@DESKTOP-07H2PR9 MINGW64 ~ (master)
$ cd project_dir/
Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ git init
Initialized empty Git repository in C:/Users/Admin/project_dir/.git/
Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ touch index.html
Admin@DESKTOP-07H2PR9 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)
Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ git add index.html
```

```
Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ git commit -m 'index.html committed as step 6'
[master (root-commit) a3f3bc4] index.html committed as step 6
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 index.html
Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$
```

7. Make few changes in index.html & create a new file info.txt file.

```
Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ git add index.html

Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ touch info.txt

Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   index.html
```

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/Admin/project_dir
Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ touch .gitignore

Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   index.html

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

Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ git add index.html

Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ git commit -m 'index.html committed'
[master 1472179] index.html committed
1 file changed, 1 insertion(+)
```

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

```

Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ git log
commit 1472179f5ac18aef4e38ec7f9de78e0e1fcce7a0 (HEAD -> master)
Author: Smrti <smrtisandilya14@gmail.com>
Date:   Fri Oct 22 15:44:15 2021 +0530

    index.html committed

commit b653e48f666c85e67383d58886fb1f3c3a52fc62
Author: Smrti <smrtisandilya14@gmail.com>
Date:   Fri Oct 22 15:29:15 2021 +0530

    changes made info.txt

commit 9b2feb352ae108380919af82a37a69adbc51a645
Author: Smrti <smrtisandilya14@gmail.com>
Date:   Fri Oct 22 15:20:29 2021 +0530

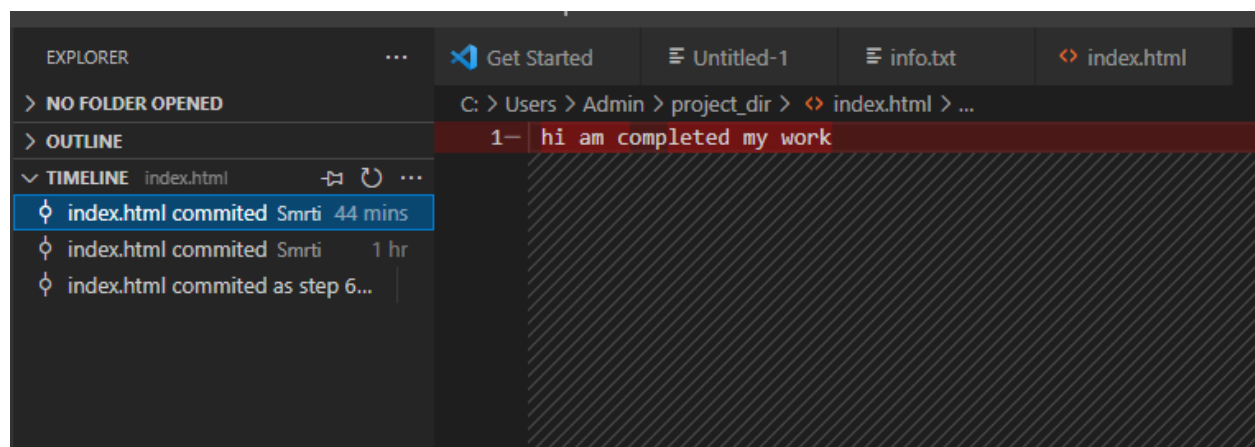
    index.html committed as step 6

Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ git checkout
M       index.html

Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ git checkout --

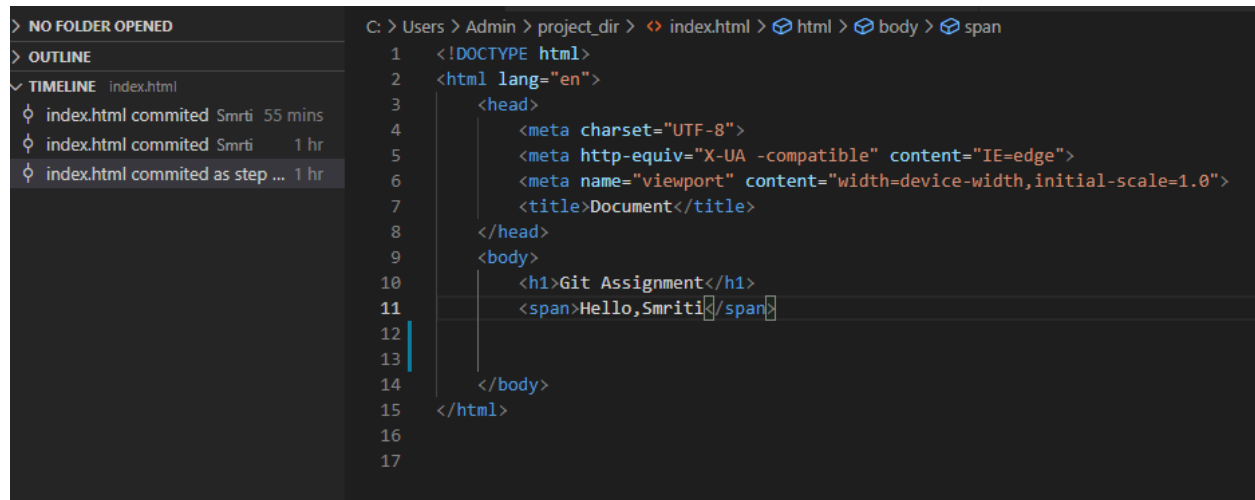
```

13.



14.

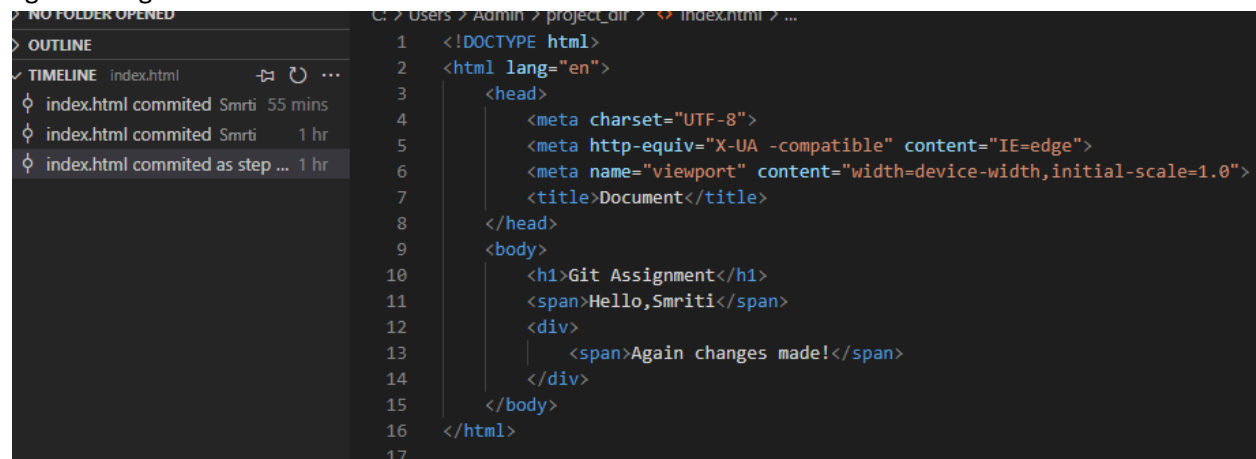
14.



The screenshot shows the VS Code editor interface. On the left, the 'TIMELINE' panel for 'index.html' shows three commits: 'index.html committed Smrti 55 mins', 'index.html committed Smrti 1 hr', and 'index.html committed as step ... 1 hr'. The main editor area shows the file path 'C: > Users > Admin > project\_dir > index.html' and the following HTML code:

```
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <meta charset="UTF-8">
5     <meta http-equiv="X-UA -compatible" content="IE=edge">
6     <meta name="viewport" content="width=device-width,initial-scale=1.0">
7     <title>Document</title>
8   </head>
9   <body>
10    <h1>Git Assignment</h1>
11    <span>Hello,Smriti</span>
12
13
14  </body>
15 </html>
```

15. Again change index.html.



The screenshot shows the VS Code editor interface. On the left, the 'TIMELINE' panel for 'index.html' shows three commits: 'index.html committed Smrti 55 mins', 'index.html committed Smrti 1 hr', and 'index.html committed as step ... 1 hr'. The main editor area shows the file path 'C: > Users > Admin > project\_dir > index.html' and the following HTML code:

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7     <title>Document</title>
8   </head>
9   <body>
10    <h1>Git Assignment</h1>
11    <span>Hello,Smriti</span>
12    <div>
13      <span>Again changes made!</span>
14    </div>
15  </body>
16 </html>
```

16.Stage index.html

17.Revert back the last stage.

18.Rename 'add' command to 'my-add'.

```

Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ git add index.html

Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ git revert HEAD index.html
fatal: bad revision 'index.html'

Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ git reset HEAD index.html
Unstaged changes after reset:
M       index.html

Admin@DESKTOP-07H2PR9 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 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")

Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ git config --global alias.my-add add

```

19. Using my\_add command Stage index.html again & commit the changes.

20. Revert the last commit.

```
$ git config --global alias.my-add add

Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ git config --global alias.my-add add

Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ git my-add index.html

Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ git commit -m 'index.html committed'
[master ec92c66] index.html committed
1 file changed, 17 insertions(+), 1 deletion(-)
rewrite index.html (100%)

Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ git log
commit ec92c66233b8a610ae47c198f5f965e8a49fcf6e (HEAD -> master)
Author: Smrti <smrtisandilya14@gmail.com>
Date:   Fri Oct 22 16:06:22 2021 +0530

    index.html committed

commit 1472179f5ac18aef4e38ec7f9de78e0e1fcce7a0
Author: Smrti <smrtisandilya14@gmail.com>
Date:   Fri Oct 22 15:44:15 2021 +0530

    index.html committed

commit b653e48f666c85e67383d58886fb1f3c3a52fc62
Author: Smrti <smrtisandilya14@gmail.com>
Date:   Fri Oct 22 15:29:15 2021 +0530

    changes made info.txt

commit 9b2feb352ae108380919af82a37a69adbc51a645
Author: Smrti <smrtisandilya14@gmail.com>
Date:   Fri Oct 22 15:20:29 2021 +0530

    index.html committed as step 6

Admin@DESKTOP-07H2PR9 MINGW64 ~/project_dir (master)
$ git commit -m 'index.html committed'
```