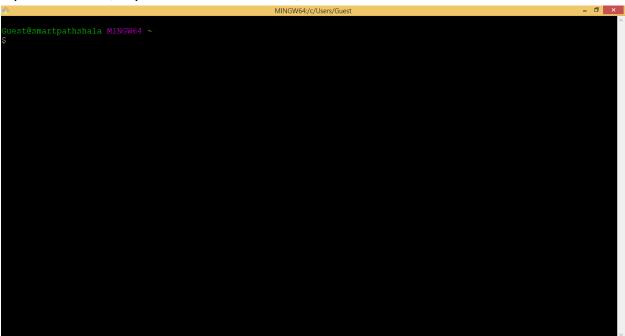


Git Basic Command Exercise

Description: By completing this exercise, you will be able to use basic git commands. You can initialize a new repository, create new files/folders, add these files to repository, commit files to repository, check your repository status, and push your files to remote repositories.

1. Open Git-bash, if you have installed Git, otherwise install Git first.



2. Create a new directory "workspace" by using "mkdir" command as shown below & press "Enter". (If already created then skip this step)



3. Change directory to "workspace" by using "cd" command as shown below.

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Type below given command and press "Enter". (**Skip if working in same directory**)

```
Guest@smartpathshala MINGW64 ~
$ cd workspace/
```

NOTE: <u>From now onwards all assignment folders should be created in this</u> directory only

4. Make a new directory "htmlassignment" in "workspace" directory by using "mkdir" command. Type below given command and press "Enter". (this step is to be followed for each assignment with new name of director)

```
Guest@smartpathshala MINGW64 ~/workspace
$ mkdir htmlassignment
```

5. Change the directory to "htmlassignment" by using "cd" command. Type below given command and press "Enter".

```
Guest@smartpathshala MINGW64 ~/workspace
$ cd htmlassignment/
```

6. Now initialize a new repository by using "git init" command as shown below. Type below given command and press "Enter".

```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment $ git init
```

7. You will see message saying an empty repository is initialized.

```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment

$ git init

Initialized empty Git repository in C:/Users/Guest/workspace/htmlassignment/.git/
```

8. Now **create a new file** "index.html" by using "touch" command. Type below given command and press "Enter".

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```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment (master) $ touch index.html
```

9. You can verify that file "index.html" got created by using "ls" command. Type below given command and press "Enter".

```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment (master)
$ ls
index.html
```

10. Now you can check your repository status by using "git status" command. Type below given command and press "Enter".

```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment (master)
$ git status
```

11. Since you have added a new file "index.html" to the repository, it will be listed as untracked file in red color.

```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment (master)

$ git status
On branch master

Initial commit

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)
```

12. You need to add this untracked file "index.html" to repository indexer. To add file to indexer, use the command "git add" as shown below. Type below given command and press "Enter".

```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment (master)
$ git add index.html |
```

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13. Now you have added the "index.html". Let's check the repository status again by using "git status" command as shown below. Type below given command and press "Enter".

```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment (master) $ git status
```

14. Since you have added "index.html" to indexer, it is now showing in green color.

```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment (master)
$ git status
On branch master
Initial commit
Changes to be committed:
   (use "git rm --cached <file>..." to unstage)
    new file: index.html
```

15. Now you have to commit the file "index.html" to the repository by using "git commit" command as shown below. Here, "-m" flag is a message flag and "Initial commit" is for committing message. Type below given command and press "Enter".

```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment (master)
$ git commit -m "Initial commit"
```

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16. Since you have not yet configured your git account on your machine, you will get below error message. (if this doesn't get displayed then it would mean that Git has picked your default log in details in that case read Step 19)

```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment (master)
$ git commit -m "Initial commit"

**** Please tell me who you are.

Run

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

to set your account's default identity.

Omit --global to set the identity only in this repository.

fatal: empty ident name (for <(NULL)>) not allowed
```

17. Now you have to configure your git email and name. First you will configure your git email by using "git config" command as shown below.

```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment (master)
$ git config --global user.email "Enter here your email address used in github account"
```

For example, here "user120240@gmail.com" is used. Instead of that, you have to enter your Email ID. Type below command and press "Enter".

```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment (master)
$ git config --global user.email "user120240@gmail.com"
```

18. You have configured your git email. Now you will configure your git user name by using "git config" command as shown below.

```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment (master)
$ git config --global user.name "Your git hub user name"
```

For example, here "user120240" is used. Instead of the shown user name you have to enter your github user name. Type below given command and

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press "Enter".

```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment (master)
$ git config --global user.name "user120240"
```

19. Now run commit command again to commit your file "index.html" to repository as shown below. Type below given command and press "Enter".

```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment (master)
$ git commit -m "Initial commit"
```

20. On successful commit, you will see the below shown message.

```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment (master)

$ git commit -m "Initial commit"

[master (root-commit) f76e307] Initial commit

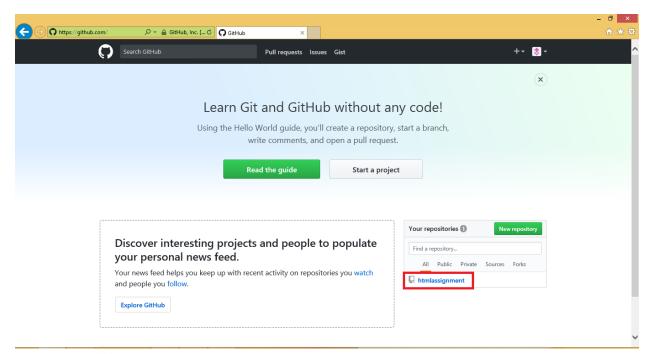
1 file changed, 0 insertions(+), 0 deletions(-)

create mode 100644 index.html
```

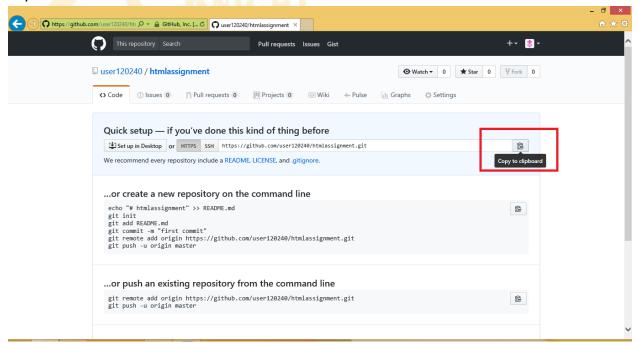
21. You have to add remote repository to connect to your local repository. Open your web browser and enter URL https://github.com/ and signin using your credentials. After successful signin, you will be landed on your dashboard page. On dashboard, you will see your repository list, you have created (Always create a new respository for new assignment; also keep same repository and assignment folder names). Click on "htmlassignment", (The repository which you have created in git profile establishment process), Repository link. If you have not created the repository yet, then use the "Profile Establishment on GitHub" file and create one.

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22. You will be redirected to repository detail page. Click on "Copy to clipboard" icon as shown in below screen.



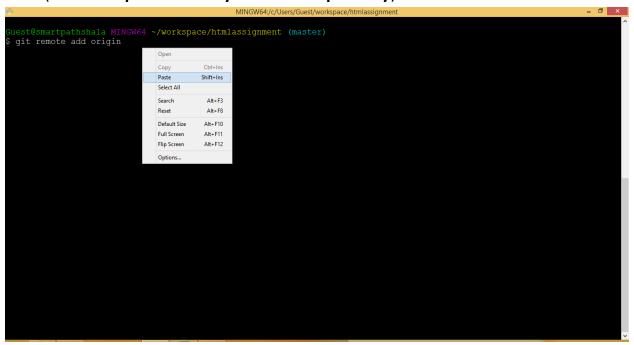
23. You have copied your remote repository URL. Now on your Gitbash, add this remote repository by using "git remote add" command as shown below

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```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment (master)
$ git remote add origin your-remote-repository-URL
```

Type "git remote add origin" (give one space after origin) on gitbash and then right click and choose option "paste" to paste your copied repository URL. (This is step is done only once in a repository)



After you click on paste, it should look like below shown message. Press "Enter" if the end result is similar.

```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment (master)
$ git remote add origin https://github.com/user120240/htmlassignment.git
```

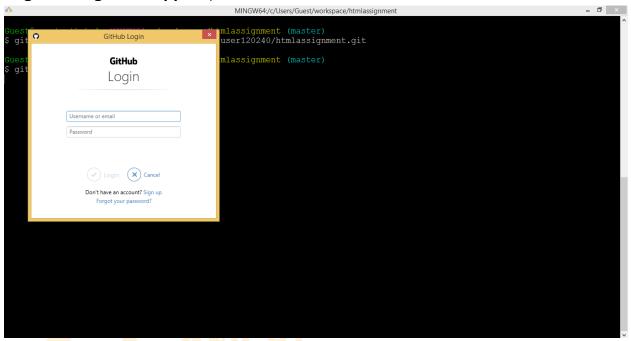
24. Now you have to push your changes from local repository to remote repository by using "git push" command as shown below. Type below given command and press "Enter".

```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment (master)
$ git push origin master
```

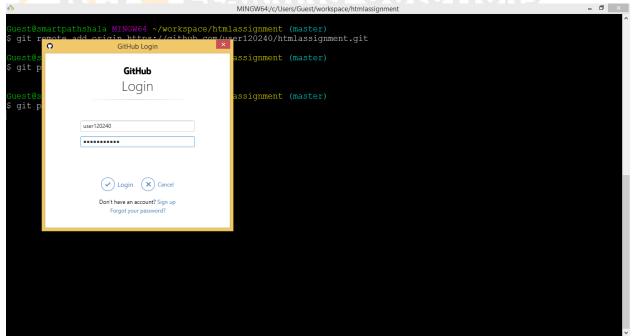
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25. It will ask for your github username and password for authentication. (this might or might not appear)



26. Enter your details and click on "Login" button.



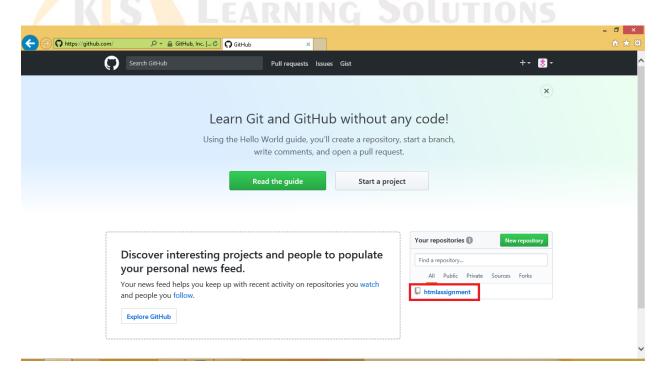
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27. On successful authentication, it will push your changes to remote repository and will display message like below.

```
Guest@smartpathshala MINGW64 ~/workspace/htmlassignment (master)
$ git push origin master
Counting objects: 3, done.
Writing objects: 100% (3/3), 210 bytes | 0 bytes/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To https://github.com/user120240/htmlassignment.git
  * [new branch] master -> master
```

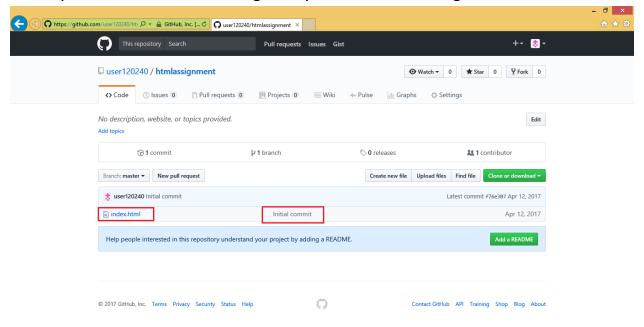
28. To verify it, Open your web browser and enter URL https://github.com/ and signin using your credentials. After successful, signin, you will land on your dashboard page. There, you will see your repository list, you have created. Click on "htmlassignment", (The repository which you have created in git profile establishment process), repository link.



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29. You will be redirected to repository detail page. And you will see your file which you have committed along with your commit message.



30. Congratulations!!! You have successfully completed this exercise.

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