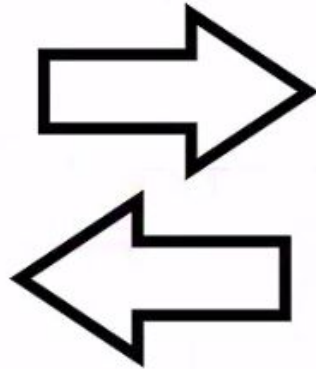
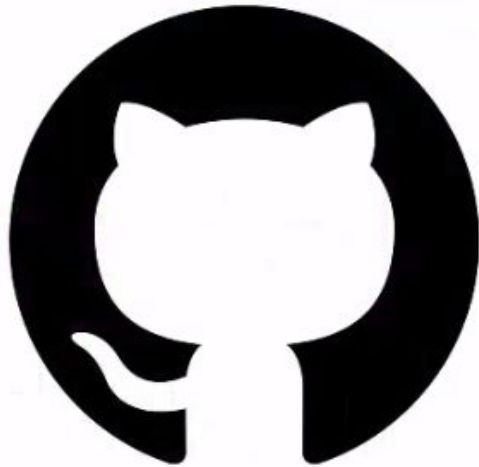


Part 7 - CLONE, PULL, PUSH TO GITHUB

GitHub



Local



CASE STUDY OF REAL TIME ON CLONE, PULL, PUSH -

- Order is important and it is best practise to do so.

STEP 1 - clone the required project from github

STEP 2 - Complete tasks on your Local Machine related to Development Activities

STEP 3 - PULL the latest changes on Remote Repository of Github, using below command

```
# git pull origin master
```

Note -

- git pull is done to fetch the updates of Remote Repository into Local Repository of user.
- Failure to do this, will cause the conflict error messages

STEP 3 - After Pull is completed Successfully, now push the changes to git Remote Repository

```
# git push origin master
```

- Steps should be followed in order

Exercise - Do the exercise for clone, pull and push --

Q. How to check , what are the files being tracked by git ?

git ls-files

- It shows all the files are tracked by git
- **It means the files listed are either tracked under staging area or under Local Repository on Local PC

Case Study -

Let us say I made the changes to a file twice and both times I have pushed to staging area in both times. What happens, if commit changes to Local Repository ?

Solution : ???

Case Study -

Let us say, you have added the file called `startup.txt` to staging area, then you edited the `startup.txt` file and added the content.

Now

Q. Should we add the `startup.txt` file to staging area again ?

Q. if we execute `git status` command, what changes do you see ?

```
[root@localhost projects]# git status
# On branch master
# Your branch is ahead of 'origin/master' by 1 commit.
#   (use "git push" to publish your local commits)
#
# Untracked files:
#   (use "git add <file>..." to include in what will be committed)
#
#       startup.txt
nothing added to commit but untracked files present (use "git add" to track)
[root@localhost projects]# git add startup.txt
[root@localhost projects]# cat /etc/shadow >> startup.txt
```

```
[root@localhost projects]# git status
# On branch master
# Your branch is ahead of 'origin/master' by 1 commit.
#   (use "git push" to publish your local commits)
#
# Changes to be committed:
#   (use "git reset HEAD <file>..." to unstage)
#
#       new file:   startup.txt
#
# Changes not staged for commit:
#   (use "git add <file>..." to update what will be committed)
#   (use "git checkout -- <file>..." to discard changes in working directory)
#
#       modified:   startup.txt
#
[root@localhost projects]#
```


CASE STUDY - TO ADD AND COMMIT CHANGES IN ONE GO.

- Create a file on Working Area on Local Machine
- Then use below command to add and commit changes to Local Repository in one go.

git commit -am "message" filename

Sample -

Check with it on depreciattion

Q. How to add the changes Recursively ?

- Let us create few folders under Project folder

```
[root@localhost projects]# mkdir globe
[root@localhost projects]# cd globe
[root@localhost globe]# touch globe_file
[root@localhost globe]# mkdir asia
[root@localhost globe]# cd asia
[root@localhost asia]# touch asia_file
[root@localhost asia]# mkdir india
```

```
[root@localhost asia]# cd india
[root@localhost india]# touch india_file
[root@localhost india]# git status
# On branch master
# Your branch is ahead of 'origin/master' by 3 commits.
#   (use "git push" to publish your local commits)
#
# Untracked files:
#   (use "git add <file>..." to include in what will be committed)
#
#   ../..
nothing added to commit but untracked files present (use "git add" to track)
[root@localhost india]#
```

```
[root@localhost india]# cd ..
[root@localhost asia]# cd ..
[root@localhost globe]# git status
# On branch master
# Your branch is ahead of 'origin/master' by 3 commits.
#   (use "git push" to publish your local commits)
#
# Untracked files:
#   (use "git add <file>..." to include in what will be committed)
#
#   ./
#
nothing added to commit but untracked files present (use "git add" to track)
[root@localhost globe]# cd ..
[root@localhost projects]# git status
# On branch master
# Your branch is ahead of 'origin/master' by 3 commits.
#   (use "git push" to publish your local commits)
#
# Untracked files:
#   (use "git add <file>..." to include in what will be committed)
#
#   globe/
#
nothing added to commit but untracked files present (use "git add" to track)
[root@localhost projects]#
```

```
[root@localhost projects]# git add globe
[root@localhost projects]# git status
# On branch master
# Your branch is ahead of 'origin/master' by 3 commits.
#   (use "git push" to publish your local commits)
#
# Changes to be committed:
#   (use "git reset HEAD <file>..." to unstage)
#
#       new file:   globe/asia/asia_file
#       new file:   globe/asia/india/india_file
#       new file:   globe/globe_file
#
[root@localhost projects]# git commit -m "adding globe folders" .
[master 66b004e] adding globe folders
3 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 globe/asia/asia_file
create mode 100644 globe/asia/india/india_file
create mode 100644 globe/globe_file
[root@localhost projects]#
```

EXPECTED INTERVIEW QUESTIONS -

Q. When we should use git pull ?

Q. What are command line arguments for git pull ?

Case Study :

I have made some changes on Local Repository, when I try to push to remote repository into github or server, I am getting error message. What could be the issue ?

THANK YOU