**JOIN FOR FREE** 

```
Now that you (presumably) know what Git is and how it works, take a look at examples of
```

how to use the top 20 Git commands. by Sahiti Kappagantula 🦃 MVB · Jan. 22, 20 · DevOps Zone · Tutorial

```
Comment (5)
Like (82)

☆ Save

                                 Y Tweet
```

Join the DZone community and get the full member experience.

Commands that you will be using frequently while you are working with Git. Here are the Git commands which are being covered: git config

```
• git init
```

git clone

git add

• git commit • git diff

git reset

 git status • git rm

• git log

git show

• git tag

git branch

git merge

 git checkout • git remote git push

git pull

git stash

So, let's get started! **Git Commands** git config

Usage: git config -global user.name "[name]" Usage: git config -global user.email "[email address]" This command sets the author name and email address respectively to be used with your commits.

edureka@master:~\$ git config --global user.name "sahitikappagantula"
edureka@master:~\$ git config --global user.email "sahiti.kappagantula@edureka.co" git init Usage: git init [repository name]

This command is used to start a new repository.

edureka@master:~\$ git init /home/edureka/Documents/DEMO Initialized empty Git repository in /home/edureka/Documents/DEMO/.git/

git clone Usage: git clone [url]

edureka@master:~/Documents/DEMO\$ git add \*

This command commits any files you've added with the git add command and also commits any files

This command is used to obtain a repository from an existing URL.

edureka@master:~\$ git clone https://github.com/sahitikappagantula/gitexample.git Cloning into 'gitexample'... remote: Counting objects: 28, done. remote: Compressing objects: 100% (16/16), done. remote: Total 28 (delta 5), reused 28 (delta 5), pack-reused 0

git add Usage: git add [file]

This command adds a file to the staging area. edureka@master:~/Documents/DEMO\$ git add project\_1

Usage: git add \*

Usage: git commit -m "[ Type in the commit message]"

This command adds one or more to the staging area.

This command records or snapshots the file permanently in the version history. edureka@master:~/Documents/DEMO\$ git commit -m "First Commit" [master (root-commit) aff3269] First Commit 9 files changed, 200 insertions(+) create mode 100644 project\_1/css/site.css

you've changed since then.

Usage: git diff -staged

On branch master

git commit

create mode 100644 project\_1/img/successCloudNew.svg create mode 100644 project\_1/img/tweetThis.svg create mode 100644 project\_1/index.html Usage: git commit -a

edureka@master:~/Documents/DEMO\$ git commit -a

nothing to commit, working tree clean

create mode 100644 project\_1/fonts/segoeuil.ttf create mode 100644 project\_1/img/cloneWhite.svg create mode 100644 project\_1/img/deployWhite.svg create mode 100644 project\_1/img/lightbulbWhite.svg create mode 100644 project\_1/img/stackWhite.svg

git diff Usage: git diff

</div> <div class="content-body"> <div class="success-text">Success!</div>

<div class="next-steps-container">

<div class="next-steps-body">

<div class="next-steps-header">Next up</div>

This command shows the file differences which are not yet staged.

diff --git a/project\_1/index.html b/project\_1/index.html

lureka@master:~/Documents/DEMO\$ git diff

index 8a985d9..94cfa0f 100644 --- a/project\_1/index.html +++ b/project\_1/index.html

dureka@master:~/Documents/DEMO/project\_1/css\$ git diff --staged diff --git a/project\_1/css/site.css b/project\_1/css/site.css index 25606b6..fba307d 100644 --- a/project\_1/css/site.css +++ b/project\_1/css/site.css height: 100%; width: 100%; Usage: git diff [first branch] [second branch] This command shows the differences between the two branches mentioned. DEMO/project\_1\$ git diff branch\_2 branch\_3 diff --git a/project\_1/index.html b/project\_1/index.html

This command shows the differences between the files in the staging area and the latest version present.

<div class="description line-2"> Your HTML app is up and running on Azure</div>

edureka@master:~/Documents/DEMO/project\_1/css\$ git reset site.css Unstaged changes after reset: project\_1/css/site.css

project\_1/index.html

This command unstages the file, but it preserves the file contents.

project\_1/index.html

HEAD is now at b01557d CHanges made in HTML file

index b567d94..94cfa0f 100644 ++ b/project\_1/index.html

git reset

commit.

git status

git rm

git log

Usage: git log

Usage: git rm [file]

Usage: git status

Usage: git reset [file]

Usage: git reset [commit]

This command undoes all the commits after the specified commit and preserves the changes locally. edureka@master:~/Documents/DEMO\$ git reset 09bb8e3f996eaf9a68ac5ba8d8b8fceb0e8641e7 Unstaged changes after reset: project\_1/css/site.css

<div class="step-icon">

<img src="img/lightbulbWhite.svg">

This command lists all the files that have to be committed. edureka@master:~/Documents/DEMO\$ git status On branch master 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)

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

This command is used to list the version history for the current branch.

ommit 09bb8e3f996eaf9a68ac5ba8d8b8fceb0e8641e7 (HEAD -> master)

Author: sahitikappagantula <sahiti.kappagantula@edureka.co>

Author: sahitikappagantula <sahiti.kappagantula@edureka.co>

edureka@master:~/Documents/DEMO\$ git log --follow project\_1

Author: sahitikappagantula <sahiti.kappagantula@edureka.co>

edureka@master:~/Documents/DEMO\$ git log

ommit aff3269a856ed251bfdf7ef87acb1716a2a9527a

ommit 2b4c50431c127a0ae9ede4aace0b8dd1f9fcf2c

Date: Fri Jul 20 12:07:28 2018 +0530

Date: Fri Jul 20 12:50:08 2018 +0530

Usage: git log -follow[file]

First Commit

New file added

Usage: git reset -hard [commit] This command discards all history and goes back to the specified

edureka@master:~/Documents/DEMO\$ git reset --hard b01557d80d5f53dcf0ebdde4d3f8b0d20d8b8c16

This command deletes the file from your working directory and stages the deletion. edureka@master:~/Documents/DEMO/project\_2\$ git rm example.txt rm 'project\_2/example.txt'

Date: Fri Jul 20 12:25:17 2018 +0530 Changes made in HTML and CSS file ommit b01557d80d5f53dcf0ebdde4d3f8b0d20d8b8c16 Author: sahitikappagantula <sahiti.kappagantula@edureka.co> Date: Fri Jul 20 12:13:29 2018 +0530 CHanges made in HTML file

This command lists version history for a file, including the renaming of files also.

This command shows the metadata and content changes of the specified commit.

<div class="success-text">Success!</div>

<div class="next-steps-container">

dureka@master:~/Documents/DEMO\$ git tag ff3269a856ed251bfdf7ef87acb1716a2a9527a 01557d80d5f53dcf0ebdde4d3f8b0d20d8b8c16

This command lists all the local branches in the current repository.

Author: sahitikappagantula <sahiti.kappagantula@edureka.co>

diff --git a/project\_1/index.html b/project\_1/index.html

<div class="content-body">

Date: Fri Jul 20 12:13:29 2018 +0530

CHanges made in HTML file

index 8a985d9..94cfa0f 100644 --- a/project\_1/index.html +++ b/project\_1/index.html

edureka@master:~/Documents/DEMO\$ git show b01557d80d5f53dcf0ebdde4d3f8b0d20d8b8c16

Author: sahitikappagantula <sahiti.kappagantula@edureka.co> Date: Fri Jul 20 12:25:17 2018 +0530 Changes made in HTML and CSS file commit b01557d80d5f53dcf0ebdde4d3f8b0d20d8b8c16 Author: sahitikappagantula <sahiti.kappagantula@edureka.co> Date: Fri Jul 20 12:13:29 2018 +0530 CHanges made in HTML file commit aff3269a856ed251bfdf7ef87acb1716a2a9527a Author: sahitikappagantula <sahiti.kappagantula@edureka.co> Date: Fri Jul 20 12:07:28 2018 +0530 First Commit git show Usage: git show [commit]

<div class="description line-1"> Azure DevOps Project has been successfully setup</div>

<div class="description line-2"> Your HTML app is up and running on Azure</div>

dureka@master:~/Documents/DEMO\$ git tag b01557d80d5f53dcf0ebdde4d3f8b0d20d8b8c16

edureka@master:~/Documents/DEMO\$ git branch branch\_1

edureka@master:~/Documents/DEMO\$ git branch -d branch\_1

<div class="next-steps-header">Next up</div> <div class="next-steps-body"> git tag Usage: git tag [commitID] This command is used to give tags to the specified commit.

git branch

Usage: git branch

git checkout

git merge

git remote

This command creates a new branch.

Usage: git branch -d [branch name]

Usage: git checkout [branch name]

Usage: git checkout -b [branch name]

Usage: git merge [branch name]

This command deletes the feature branch.

edureka@master:~/Documents/DEMO\$ git branch Usage: git branch [branch name]

Deleted branch branch\_1 (was be040cc).

This command merges the specified branch's history into the current branch.

Usage: git remote add [variable name] [Remote Server Link]

edureka@master:~/Documents/DEMO\$ git push origin master Username for 'https://github.com': sahitikappagantula Password for 'https://sahitikappagantula@github.com':

This command sends the branch commits to your remote repository.

//riting objects: 100% (42/42), 463.10 KiB | 3.62 MiB/s, done.
//otal 42 (delta 9), reused 0 (delta 0)

https://github.com/sahitikappagantula/GitDemo.git

This command pushes all branches to your remote repository.

sername for 'https://github.com': sahitikappagantula Password for 'https://sahitikappagantula@github.com':

project 1/index.html | 2 +

This command is used to switch from one branch to another.

Switched to branch 'branch\_2'

This command creates a new branch and also switches to it. edureka@master:~/Documents/DEMO\$ git checkout -b branch\_4 Switched to a new branch 'branch\_4'

edureka@master:~/Documents/DEMO\$ git merge branch\_2

1 file changed, 1 insertion(+), 1 deletion(-)

Merge made by the 'recursive' strategy.

This command sends the committed changes of master branch to your remote repository.

eka@master:~/Documents/DEMO\$ git checkout branch\_2

This command is used to connect your local repository to the remote server. edureka@master:~/Documents/DEMO\$ git remote add origin https://github.com/sahitikappagantula/GitDemo.git git push

Usage: git push [variable name] master

Counting objects: 42, done.

Delta compression using up to 2 threads. Compressing objects: 100% (32/32), done.

Writing objects: 100% (42/42), 463.10 KiB | 3.62 MiB/s, done. Total 42 (delta 9), reused θ (delta θ) remote: Resolving deltas: 100% (9/9), done. To https://github.com/sahitikappagantula/GitDemo.git \* [new branch] master -> master Usage: git push [variable name] [branch]

Counting objects: 42, done.

Usage: git push -all [variable name]

\* [new branch]

Everything up-to-date

Usage: git pull [Repository Link]

git pull

Usage: git push [variable name] :[branch name]

This command deletes a branch on your remote repository.

elta compression using up to 2 threads. ompressing objects: 100% (32/32), done.

remote: Resolving deltas: 100% (9/9), done.

edureka@master:~/Documents/DEMO\$ git push --all origin Username for 'https://github.com': sahitikappagantula Password for 'https://sahitikappagantula@github.com': Total 0 (delta 0), reused 0 (delta 0) Fo https://github.com/sahitikappagantula/GitDemo.git \* [new branch]

edureka@master:~/Documents/DEMO\$ git push origin : branch\_2

Username for 'https://github.com': sahitikappagantula Password for 'https://sahitikappagantula@github.com':

branch\_3 -> branch\_3

branch 4 -> branch 4

This command fetches and merges changes on the remote server to your working directory. ureka@master:~/Documents/DEMO\$ git pull https://github.com/sahitikappagantula/gitlearn.git marning: no common commits emote: Counting objects: 13, done remote: Compressing objects: 100% (8/8), done. remote: Total 13 (delta 1), reused 10 (delta 1), pack-reused 0 Unpacking objects: 100% (13/13), done. From https://github.com/sahitikappagantula/gitlearn git stash Usage: git stash save

This command temporarily stores all the modified tracked files.

This command restores the most recently stashed files.

Changes not staged for commit:

edureka@master:~/Documents/DEMO/project\_1\$ git stash save

ureka@master:~/Documents/DEMO/project\_1\$ git stash pop

edureka@master:~/Documents/DEMO/project\_1\$ git stash list stash@{0}: WIP on master: 5f6ba20 Merge branch 'branch\_2'

Saved working directory and index state WIP on branch\_2: 5152fcd Index.html updated

(use "git add <file>..." to update what will be committed) no changes added to commit (use "git add" and/or "git commit -a")
Dropped refs/stash@{0} (365fa2ef6ed4f1f8d7d406bd0abb205279aad0c5)

n branch branch\_2

This command lists all stashed changesets.

Usage: git stash pop

Usage: git stash list

Usage: git stash drop This command discards the most recently stashed changeset.

**ABOUT US** 

**About DZone** 

**Become a Contributor** 

Visit the Writers' Zone

**Terms of Service Privacy Policy** 

**LEGAL** 

edureka@master:~/Documents/DEMO/project\_1\$ git stash drop stash@{0} Oropped stash@{0} (5e2cbcea1b37d4e5b88854964d6165e461e2309d) Want to learn more about git commands? Here is a Git Tutorial to get you started. Alternatively, you can take a top-down approach and start with this DevOps Tutorial.

Topics: OPEN SOURCE, GIT, GIT COMMANDS, COMMAND EXAMPLES

Published at DZone with permission of Sahiti Kappagantula, DZone MVB. See the original article here. Opinions expressed by DZone contributors are their own.

**Developer Marketing Blog Advertise with DZone** Send feedback +1 (919) 238-7100 Careers **CONTACT US CONTRIBUTE ON DZONE MVB Program 600 Park Offices Drive Zone Leader Program** Suite 150

1.15M Views

In the previous blog, you got an understanding of what git is. In this blog, I will talk about the Top 20 Git

Q

Let's be friends: DZone.com is powered by AnswerHub logo

Research Triangle Park, NC 27709 support@dzone.com +1 (919) 678-0300

**ADVERTISE**