

# Git and GitHub Part-2 Assessment-3

## 01. How to check if Git is available on your system?

**Ans:** To check whether or not you have **git installed**, simply open a terminal window and type **"git --version"**.

## 02. How to initialize a new Git repository?

**Ans:** To create a **new repo**, you'll use the **git init** command. **git init** is a one-time command you use during the initial setup of a **new repo**. Executing this command will create a new .

Normally a folder will be created in the developers works place and inside the folder the source code would be place

Normally this is the first command which we execute to set up the git for operations like **clone,push,pull,...**

This command internally creates one folder called **.git**

**.git** is used by git software to identify the folder which should participate in pushing to **"local"** and **"remote"** repositories.

**syntax : git init**

## 03. How to tell Git about your name and email?

**Ans:** It is used when the git software is used for the first time.

The command will set the developer identity like **name,email id....**

This configuration information will be used by git software for every push operation encountered.

> **git config --list** //this command is used to provide the list of configuration

### To set the username and email

> **git config --global user.name "username"**

> **git config --global user.email "useremail@gmail.com"**

### global

it indicates the user can work with git commands from different drives of the computer.

### NOTE:

To display the location of git configuration holded by git software

**git config --list --show-origin**

## 04. How to add a file to the staging area?

**Ans:** To send the code from workspace to stage area we use the following command

**Syntax : git add <file-name>**

If we want to push all the files from workspace to stage area,we use the following command.

**syntax: git add .**

**git add --a**

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## 05. How to remove a file from the staging area?

**Ans:** To remove a file from the staging area, go to the Git desired directory, create and stage a new text file. Then, view the repository's current status. After that, execute the “\$ **git rm --cached <file-name>**” command to remove the particular file.

## 06. How to make a commit?

**Ans:** The file which are ready for commit should be in stage area, to perform commit operation we use the following command

**Syntax:** **git commit -m <some-messages>**

**eg1.** **git commit -m "first commit" //**This file commit all the files present in stage area

**eg2.** **git commit -m "second commit" filename //**This will commit only that file into local repository

## 07. How to send your changes to a remote repository?

**Ans:** To push the commit from the local repo to your remote repositories, run **git push -u remote-name branch-name** where **remote-name** is the nickname the local repo uses for the remote repositories and branch-name is the name of the branch to push to the repository.

open **github.com** by providing the credentials.

create a new repository and enter some name(repository name) and click on create repository

To perform push operation we need to use the following command

**git branch - main**

**git remote add origin https://github.com/NitinTechnology/workspace.git**

**git push -u origin main**

## 08. What is the difference between clone and pull?

**Ans:** **git clone** is how you get a local copy of an existing repository to work on. **git pull** (or **git fetch + git merge** ) is how you update that **local copy** with new commits from the remote repository.

### Difference between pull and clone

#### i. **git pull**

It is used to fetch the latest changes made in the remote repository to the working directory.

**syntax:** **git pull**

#### ii. **git clone**

It is used to clone the repository to the working directory of the developer.

**syntax:** **git clone <url>**