# Lesson 3 - Git and GitHub I

## What is Version Control?

The management of changes to documents, computer programs, large web sites, and other collections of information. **Git** is a free and open-source version control system.

## Git vs GitHub?

Git is the tool that enables change tracking, GitHub is an online website that lets you host the repositories that you want to collaborate on and track.

## Git Commands

**clone** – Copy remote repository from GitHub etc into a folder on your local machine.
**add** – track your files and changes in git.
**commit** – save your files in git.
**push** – upload git commits to a remote repo, like GitHub.
**pull** – Download changes from remote repo to your local machine, the opposite of push.
**init** – initialize a git repository

## How to Create a new local repository and add it to GitHub?

1. Initialize your local repository. In your terminal, type
   `git init`
2. Add changes to git
   `git add .`
3. Commit changes in git
   `git commit -m "commit message"`
4. Create a repository on GitHub and copy its HTTPS link
5. Add the remote HTTP link to your local repository (below sample link is given)
   `git remote add origin https://github.com/Amadkazmi/helloworld.git`

6. Push changes to remote

```
git push origin main
```