**WEEK-1**

**AIM:** Show version control with respective login credentials in GIT and GITHUB using simple html code.

**GIT (Global Information Tracker)**

While working on GIT, we actively use two repositories.

1. **GIT:** Local repository: The local repository is present on our work space or in our computer and consists of all the files in a folder. This repository is used to create a file or make changes locally, adding those files to staging area and commit them as offline to review history.
2. **Git hub:** Remote repository refers to the server repository that you may access it anywhere. This repository is used by all the team members to exchange the changes they made. Collaborate

**Steps to follow to execute 1st week program by creating repositories**

**Step 1:** Open any text editor like visual studio, create a folder as **Week-1 (**user defined**)**

**Step 2:** Create a HTML File one.html in Week-1 folder, write below code, and save it.

**Source Code:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>CMRIT</title>

</head>

<body>

<h1> We are CSD-A students</h1>

</body>

</html>

**Step 3:** Go to Terminal -New terminal, and checkout whether you are in current directory or not. Your path is… C:/users/student/desktop/Week-1>

**Step 4:** Git commands : Working to with local repositories.

1. C:/users/student/desktop/Week-1> **git init**

The commands git init command is used to create an empty git repository.

You can check .git repository is created or not for that, go to C:/users/student/desktop/Week-1>

.git folder is available, if not, go to views ---show---hidden items---you can find now.

**5). git config :** It is used to configure your global Git user name and user email. It specifies the name and email that will be associated with your commits when you contribute to a Git repository.

C:/users/student/desktop/Week-1> Git config – global user.name “Yamuna”

C:/users/student/desktop/Week-1> Git config – global user.email “[msg2yamuna@cmritonline.ac.in](mailto:msg2yamuna@cmritonline.ac.in)” (It should be valid user email)

**Step 6:** Git add: Add command is used to add any new or modified files by using git add. (or) git add file name.

C:/users/student/desktop/Week-1> git add one.html

**Step 7:** git status: The git status command tells the current state of the repository.

C:/users/student/desktop/Week-1> git status

The command helps in understanding the state of current branch by showing the commits that leads to this state.

**Step 8:** git log: The git log command shows the order of the commit history for a repository.

C:/users/student/desktop/Week-1> git log

**Step 9:** git commit: The commit command and make sure the changes are saved git commit –m “First commit ”.

C:/users/student/desktop/Week-1> git commit -m “First Commit”

**To create github account, Go to official web site, Github.com**

**Step 10:** Git commands: working with remote Repositories

Step i). First create Github account and login.

Step ii). Next create new Repository.

Step iii). Enter Repository name as CSDA.

Step iv). Click button to “create repository”.

**Step 11:** git remote <URL address), available in left-bottom in github

C:/users/student/desktop/Week-1> git remote add origin https://github.com/YamunaCMR/CSDA.git

The git remote command is used to create, view and delete connections to other repositories

**Step 12:** Git push: The command git push is used to transfer the commits or pushing the file or content from the local repository to the remote repository.

C:/users/student/desktop/Week-1> git push –u origin main/master

**Step 13:** Git clone: The git clone command is used to create a local working copy of an existing remote repository.

C:/users/student/desktop/Week-1> Git clone https://github.com/YamunaCMR/CSDA.git<remote URL>

**Step 14:** Git pull: The Git pull command is used to any changes in the remote repository to the local repository.

C:/users/student/desktop/Week-1> git pull origin master

**Step 15:** Git clone: The Git clone command is used to copy entire existing remote repository to our local repository folder.

Create new folder in vscode, and make it as git repository by using git init command.

And go to github, go to code and copy the URL after git clone,

C:/users/student/desktop/Week-1> git clone https://github.com/YamunaCMR/CSDA.git

**Step 16:** Git branch: to know the branch where we are working.

C:/users/student/desktop/Week-1> git branch

**Step 17:** Git checkout: To create a new branch and switch on to new branch:

O/p: master

\*dev (\* means we are in dev branch)

C:/users/student/desktop/Week-1> git checkout -b dev.

Right now we are in dev branch,

Create one file b.html in dev branch.

Add, commit in dev branch b.html in dev branch itself.

To bring that file into master branch, we can use merge keyword.

Come to master branch

C:/users/student/desktop/Week-1> git checkout master

O/p: dev

\*master (\* means we are in master branch)

C:/users/student/desktop/Week-1>git merge dev

Now we can able to see our dev branch file in master branch also.