

1. Version Control Using Git in Browser

Objective: Learn to use GitHub/GitLab/Bitbucket to manage projects.

Lab Steps:

1. **Sign Up** at [GitHub](#) or [GitLab](#).
2. **Create a New Repository:**
 - Click **New Repository**.
 - Provide a name and description.
 - Add a **README.md** file.
3. **Upload Files Manually:**
 - Click **Add File > Upload File**.
 - Select files and commit changes.
4. **Modify Files Online:**
 - Open a file and click **Edit**.
 - Make changes and commit.
5. **Check File History:**
 - Open a file and click **History**.

Expected Output:

- A version-controlled project with a history of changes.

2. Version Control Using Git with Push and Pull Commands

Objective: Use Git for version control from the terminal.

Lab Steps:

- a) **Install Git (if not installed):**
- b) `sudo apt update`
- c) `sudo apt install git -y`
- d) **Configure Git:**
- e) `git config --global user.name "Your Name"`
- f) `git config --global user.email "you@example.com"`
- g) **Clone an Existing Repository:**
- h) `git clone <repository_url>`
- i) `cd <repo_name>`
- j) **Modify a File & Commit Changes:**
- k) `echo "New changes" >> file.txt`
- l) `git add .`
- m) `git commit -m "Updated file"`
- n) **Push to Remote Repository:**
- o) `git push origin main`
- p) **Pull Latest Changes:**
- q) `git pull origin main`

Expected Output:

- Changes should be reflected on GitHub/GitLab.