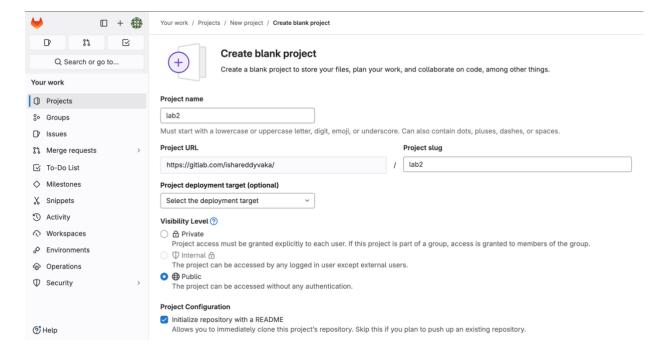
Ex. No: 2	Gitlab Operations using Git			
06.08.2024	Gittab Operations using Git			

#### Aim:

To practice fundamental Git operations using GitLab, including repository creation, cloning, making changes, branching, pushing changes, collaborating through merge requests, and syncing changes.

### **Procedure:**

1. Create a Repository



### 2. Cloning a Repository

a. Use **git clone <repository\_url>** with the URL you copied from GitLab

```
[(base) ishareddyvaka@Ishas-MacBook-Air lab2 % git clone https://gitlab.com/ishareddyvaka/lab2.git Cloning into 'lab2'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (3/3), done.
```

- 3. Making Changes and Creating a Branch
  - a. Navigate into the cloned repository

# [(base) ishareddyvaka@Ishas-MacBook-Air lab2 % cd lab2

- b. Create a new text file named "filename.txt" using a text editor.
- c. Add some content to the "filename.txt" file.
- d. Save the file and return to the command line.

# e. Check the status of the repository

```
[(base) ishareddyvaka@Ishas-MacBook-Air lab2 % git status
On branch main
Your branch is up to date with 'origin/main'.

Untracked files:
    (use "git add <file>..." to include in what will be committed)
        filename.txt

nothing added to commit but untracked files present (use "git add" to track)
```

- f. Stage the changes for commit
- g. Commit the changes with a descriptive message "Edited\_example.txt"

```
[(base) ishareddyvaka@Ishas-MacBook-Air lab2 % git add .
[(base) ishareddyvaka@Ishas-MacBook-Air lab2 % git commit -m "Edited_example.txt"
[main 7bb73fe] Edited_example.txt
  Committer: Isha reddy Vaka <ishareddyvaka@Ishas-MacBook-Air.local>
  Your name and email address were configured automatically based
  on your username and hostname. Please check that they are accurate.
  You can suppress this message by setting them explicitly. Run the
  following command and follow the instructions in your editor to edit
  your configuration file:
    git config --global --edit

After doing this, you may fix the identity used for this commit with:
    git commit --amend --reset-author

1 file changed, 1 insertion(+)
    create mode 100644 filename.txt
```

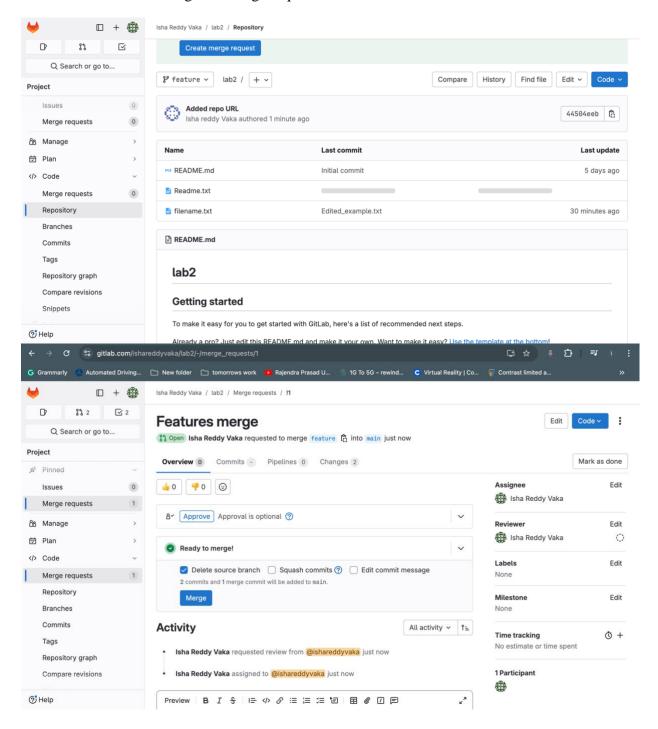
- h. Create a new branch named "feature"
- i. Switch to the "feature" branch
- j. Pushing Changes to GitLab

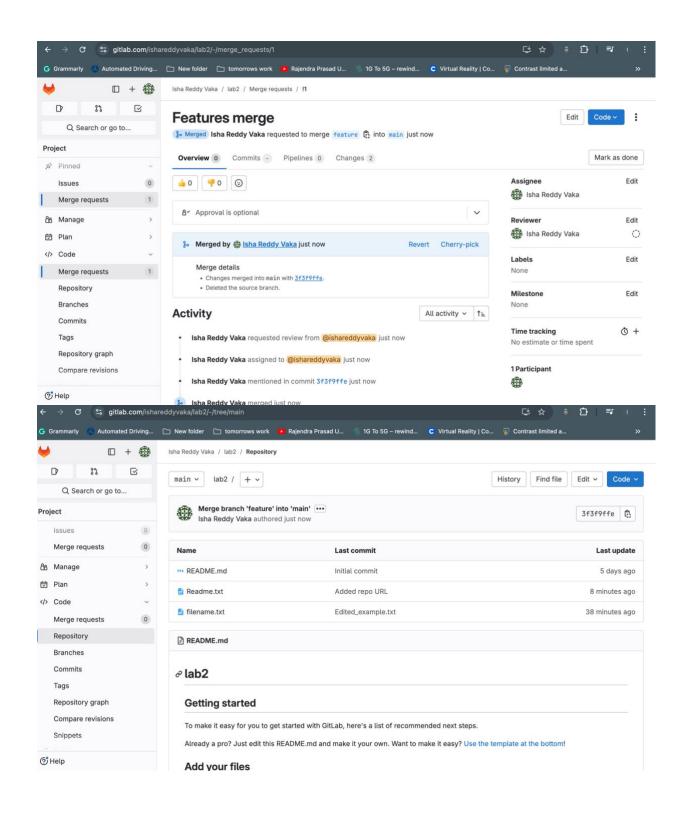
[(base) ishareddyvaka@Ishas-MacBook-Air lab2 % git checkout -b feature Switched to a new branch 'feature'

```
[(base) ishareddyvaka@Ishas-MacBook-Air lab2 % git push origin feature
Username for 'https://gitlab.com': ishareddyvaka
[Password for 'https://ishareddyvaka@gitlab.com':
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 328 bytes | 328.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: To create a merge request for feature, visit:
remote: https://gitlab.com/ishareddyvaka/lab2/-/merge_requests/new?merge_request%5Bsource_branch%5D=feature
remote:
To https://gitlab.com/ishareddyvaka/lab2.git
* [new branch] feature -> feature
```

- 4. Add Repository URL in a variable
  - a. Add Repository URL in a variable
  - b. Replace <repository\_url> with the URL you copied from GitLab
  - c. Push the "feature" branch to GitLab
  - d. Check your GitLab repository to confirm that the new branch "feature" is available.

- 5. Collaborating through Merge Requests
  - a. Create a merge request on GitLab
  - b. Review and merge the merge request





# 6. Syncing Changes

a. After the merge request is merged, update your local repository

```
[(base) ishareddyvaka@Ishas-MacBook-Air lab2 % git checkout main
Switched to branch 'main'
Your branch is ahead of 'origin/main' by 1 commit.
   (use "git push" to publish your local commits)
(base) ishareddyvaka@Ishas-MacBook-Air lab2 % git pull origin main
remote: Enumerating objects: 1, done.
remote: Counting objects: 100% (1/1), done.
remote: Total 1 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (1/1), 248 bytes | 124.00 KiB/s, done.
From https://gitlab.com/ishareddyvaka/lab2
                         main -> FETCH_HEAD
 * branch
    47ce47e..3f3f9ff main
                                      -> origin/main
Updating 7bb73fe..3f3f9ff
Fast-forward
 Readme.txt | 1 +
 1 file changed, 1 insertion(+) create mode 100644 Readme.txt
```

### **Result:**

Therefore, we've successfully performed all the Gitlab operations using Git.