

Implement GitLab Operations using Git:

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IoT-B

1. Creating a Repository
2. Cloning a Repository
 - a. Use **git clone <repository_url>** with the URL you copied from GitLab

```
trisha@trisha-IdeaPad-5-15ITL05:~/Documents/Sem 7/DOLAB/Exercise 2$ git clone https://gitlab.com/devopslab7824832/Ex2
Cloning into 'Ex2'...
Username for 'https://gitlab.com': rbrtrisha
Password for 'https://rbrtrisha@gitlab.com':
warning: redirecting to https://gitlab.com/devopslab7824832/Ex2.git/
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
 - 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

```
trisha@trisha-IdeaPad-5-15ITL05:~/Documents/Sem 7/DOLAB/Exercise 2$ cd Ex2
trisha@trisha-IdeaPad-5-15ITL05:~/Documents/Sem 7/DOLAB/Exercise 2/Ex2$ nano filename.txt
trisha@trisha-IdeaPad-5-15ITL05:~/Documents/Sem 7/DOLAB/Exercise 2/Ex2$ 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"

```
trisha@trisha-IdeaPad-5-15ITL05:~/Documents/Sem 7/DOLAB/Exercise 2/Ex2$ git add filename.txt
trisha@trisha-IdeaPad-5-15ITL05:~/Documents/Sem 7/DOLAB/Exercise 2/Ex2$ git commit -m "Edited filename.txt"
[main e0d714a] Edited filename.txt
 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

```
trisha@trisha-IdeaPad-5-15ITL05:~/Documents/Sem 7/DOLAB/Exercise 2/Ex2$ git branch feature
trisha@trisha-IdeaPad-5-15ITL05:~/Documents/Sem 7/DOLAB/Exercise 2/Ex2$ git checkout feature
Switched to branch '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

```
trisha@trisha-IdeaPad-5-15ITL05:~/Documents/Sem 7/DOLAB/Exercise 2/Ex2$ repo_url=https://gitlab.com/devopslab7824832/Ex2
trisha@trisha-IdeaPad-5-15ITL05:~/Documents/Sem 7/DOLAB/Exercise 2/Ex2$ git push -u origin feature
Username for 'https://gitlab.com': rbrtrisha
Password for 'https://rbrtrisha@gitlab.com':
warning: redirecting to https://gitlab.com/devopslab7824832/Ex2.git/
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), 324 bytes | 324.00 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/devopslab7824832/Ex2/-/merge_requests/new?merge_request%5Bsource_branch%5D=feature
remote:
To https://gitlab.com/devopslab7824832/Ex2
 * [new branch]      feature -> feature
Branch 'feature' set up to track remote branch 'feature' from 'origin'.
```

- 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

```
trisha@trisha-IdeaPad-5-15ITL05:~/Documents/Sem 7/DOLAB/Exercise 2/Ex2$ 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)
trisha@trisha-IdeaPad-5-15ITL05:~/Documents/Sem 7/DOLAB/Exercise 2/Ex2$ git pull origin main
Username for 'https://gitlab.com': rbrtrisha
Password for 'https://rbrtrisha@gitlab.com':
warning: redirecting to https://gitlab.com/devopslab7824832/Ex2.git/
From https://gitlab.com/devopslab7824832/Ex2
 * branch      main      -> FETCH_HEAD
Already up to date.
trisha@trisha-IdeaPad-5-15ITL05:~/Documents/Sem 7/DOLAB/Exercise 2/Ex2$
```