DevOps Lab - Nakshathra

Exercise 1

Task 1 - Exploring Git Commands through Collaborative Coding – Basic Git commands

a. Create a Repository

- Setting up a Git repository named "Master".

```
git init
```

b. Add and Commit Changes

- Create a new text file named `ReadMe.txt` using any text editor.

```
touch README.md
ls
```

c. Exploring History

- Modify or add content to the text file.

```
echo "# This is the readme file for devops" › README md
git add README. md
git commit -m "Added README. md"
```

d. Branching and Merging

- Create a new branch named `Updated_ReadMe` and commit the changes in the branch.

- Merge the changes from the `Updated_ReadMe` branch into the `Master` branch.

```
git checkout Updated_README
echo "# This is the README file for DevOps" > README. md
git add README. md
git commit -m "Corrected content of README. md"
git checkout main
git merge Updated_README
```

e. Collaborating with Remote Repositories

- Link your local repository to the remote repository.

```
git remote add origin https://github.com/NakshathraP/DevOps.git
```

f. Push Changes

- Push your local commits to the remote repository.

```
git branch -M main
git push -u origin main
```

Task 2 - Implement GitHub Operations using Git

a. Cloning a Repository

- Clone the repository of your project from GitHub.

```
git clone https://github.com/NakshathraP/DevOps.git
```

b. Making Changes and Creating a Branch

- Navigate into the cloned repository, make the necessary changes, and check the status of the repository.

```
cd WebTechLab
touch README. md
echo "# This is the README file for WebTechLab" > README. md
git status
```

c. Pushing Changes to GitHub

- Add the repository URL to a variable.
- Push the local branch to the repository.

d. Collaborating through Pull Requests

- Create a pull request on GitHub.
- Choose the base branch and compare it with the new branch.
- Review the changes and merge the pull request.

- Add a title and description for the pull request.
- Assign reviewers.
- Reviewers approve the pull request and merge it into the base branch.

e. Syncing Changes

- After the pull request is merged, update your local repository.

```
git pull origin main
```

```
PS C:\Users\naksh\Downloads\DevOps> git add .
PS C:\Users\naksh\Downloads\DevOps> git commit -m "Updated README.md"
[main a15e695] Updated README.md
 1 file changed, 1 insertion(+), 1 deletion(-)
PS C:\Users\naksh\Downloads\DevOps> git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Writing objects: 100% (3/3), 265 bytes | 265.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/NakshathraP/DevOps.git
   eec76fd..a15e695  main -> main
PS C:\Users\naksh\Downloads\DevOps> git checkout ex1
error: pathspec 'ex1' did not match any file(s) known to git
PS C:\Users\naksh\Downloads\DevOps> git checkout -b ex1
Switched to a new branch 'ex1'
PS C:\Users\naksh\Downloads\DevOps> git add .
PS C:\Users\naksh\Downloads\DevOps> git commit -m "Ex1"
[ex1 5853d15] Ex1
 2 files changed, 132 insertions(+)
 create mode 100644 Lab/Ex1/Ex1.md
 create mode 100644 Lab/photos/.md
```

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Details

- Registration No. - 21011102070
- Class - IoT B