# MSD - CS445 - Collaborative Git

## Exercise 01

\*\*Practice all the local repository commands from the slides:\*\*

1. `git init`

2. `git status`

3. `git diff`

4. `.gitignore` file

5. `git add`

6. `git commit`

7. `git commit –amend` (updating the last commit)

8. `git log`

9. `git show`

10. `git tag`

11. `git branch`

12. `git checkout`

13. `git merge`

14. Create a conflict and solve the conflict

15. Undo changes from a certain commit `git revert`

16. Erase commits with `git reset`

\*\*Practice all the remote repository commands from the slides:\*\*

1. Create a remote repository

2. Create `README.md`

3. Add at least 5 markdown syntax (For example: Headers, Bold, Code, Unordered List, Links) [Cheatsheet](https://github.com/adam-p/markdown-here/wiki/Markdown-Cheatsheet)

4. `git remote`

5. `git clone`

6. `git push`

7. `git fetch`

8. `git pull`

\*\*Practice all the third party repositories commands from the slides:\*\*

Assume we are working with the following upstream: `https://github.com/asaadsaad/autocannon\_clinic`

1. Star the repository

2. Watch the repository for any changes

3. Fork the repository

4. Clone your forked repository into your local machine

5. Create a new topioc branch called `msd`

6. Checkout your new branch

7. Add a new file with your name, example: `asaad.txt`

8. Commit the changes

9. Link your repository to the upstream

10. Fetch and Merge (no changes will be made, so you can skip this step)

11. Push your changes to the remote

12. Create a new Pull Request to the upstream

## Exercise 2

Read the following [Blog Article](https://backlog.com/git-tutorial/branching-workflows/) and write down your notes on the Branching Workflows.