GitHub Branching & Merging

1) In Local Repo (Your computer) create a new branch off main

In your terminal. run.

```
git branch
```

this will list all the branches in your local repo.

Usually, and especially if you have not added any new branches, you should only see 1 branch like so:

```
*main
```

NOTE: usually the name of the selected branch is in green

^ the star indicates that you are currently on this branch

to create a new one, run:

```
git branch <new-branch-name>
```

After running this command, the output of git branch should be:

```
*main
<new-branch-name>
```

Let's switch into this branch by running

```
git checkout <new-branch-name>
```

Now, git branch will produce

```
main
* <new-branch-name>
```

2) Make edits to your files, add & commit them, and push them to your remote repo

After making edits to your file, run:

```
git add .
git commit -m "<your-messge>"
git push origin <new-branch-name>
```

What this push will do is, by default, create a branch in your remote repo with the same name as the branch in your local repo that you are pushing from. It will only create that branch if it's the first time you are pushing - otherwise it will "automatically" connect and transfer the changes.

→

3) Pull Request (on GitHub)

On GitHub, you should see that you have a new branch with the same name as the branch on your local that you are pushing from.

Most often than not, you will get a small notification on the main page saying: <new-branch-name> has recent pushes Compare & Pull Request.
In this case, click the green button.

If this does not happen:

- simply navigate to the "Pull Requests" tab on the top.
- Press "New Pull Request"
- select the branch (<new-branch-name>)
  - → At the top, you should see a status indicator that signifies if you are able to merge these branches.

- If you're good to go, press "Create Pull Request" and then press it again
- Press "Merge Pull Request" & then "Confirm Merge"
- After it merges, press "Delete Branch"

Now, in your remote repo, you should no longer see your branch <new-branch-name>

4) Pulling, Pruning, Deleting (Local Git)

Go back to your terminal and navigate to your main branch

```
git checkout main
```

Now, pull the new additions from your remote to your local:

```
git pull -p
```

↳ the "-p" indicates that you are "pruning" dead branches AKA the one you deleted through GitHub. This just reflects that change.

Finally, you can delete the branch you make all the way at the beginning:

```
git branch -d <new-branch-name>
```

AND YOU'RE DONE!