

Lab 1.3 GitHub

Clone https (you can use this to get sample code)

1. Get the url you want:
either my URL

```
https://github.com/andrewbeattycourseware/pforcs2021.git
```

Or from github

- a. Go to GitHub
 - b. Select the repository you want to clone (create one if required)
 - c. In code select the https
 - d. Copy the url to the clipboard by clicking the clipboard symbol on right
2. Go to CMDER (or terminal in VSCode)
 3. Navigate to where you want to make the repository
 4. Clone the repository (you can paste the name in right clicking)

```
git clone PASTED.URL
```

5. Set the pull mode to merge

```
git config pull.rebase false
```

6. Pull the content of the remote repository

```
git pull
```

7. Copy any files you wish into the folder (or create files/folders)

```
cd nameOfDirectory  
echo "test content" > test.txt
```

8. Add the files to the repository

```
git add .
```

9. Commit any changes

```
git commit -m "test"
```

10. Push the files to GitHub (you will need your username and password)

```
git push
```

Danger to remove a repository just delete the .git folder

11. Check If the .git directory exists

```
ls -a
```

12. You can delete the repository (and not the files in it) **Danger**

```
rm -rf .git
```

13. Or you can delete the folder containing the repository **Danger**

```
cd ..  
rm -rf nameOfFolder
```

Clone using SSH (handy for your repository)

1. More information on this

[About SSH - GitHub Docs](#)

2. Check if there are any keys already on your machine

~ is resolved to be your home directory

```
ls ~/.ssh
```

3. If none create one key pair

```
ssh-keygen -t ed25519 -C "your.email@gmit.ie"
```

ssh-keygen creates a key pair **ed25519** used for encryption **-C email**, this is probably not required

4. Copy the public key to clipboard

```
clip < ~/.ssh/id_ed25519.pub
```

clip
< is the clipboard redirect input

5. Go to GitHub
6. Click the icon in the top right and select settings
7. Select SSH and GPG keys
8. Click new SSH key and paste in the public key

You are now ready to clone

9. Go to the repository that you want
10. Select code
11. Select SSH and copy the URL by clicking the clipboard

```
git@github.com:yourAccount/theRepository.git
```

12. Clone the repository by repeating steps 7 to 9 above

```
git clone PASTED.URL
git config pull.rebase false
git pull
```

13. Test that you can push on this as well

```
cd nameOfDirectory
echo "test content" > test.txt
git add .
git commit -m "test"
git push
```

Extra Creating a repository on local and linking with GitHub

1. Create a repository on GitHub
2. Go into the repository, click code and copy the URL (for either HTTPS or SSH if you have set up your keys already)
3. Navigate to the folder that you wish to make a repository out of.
4. Create the repository

```
git init
```

5. Set pulling mode

```
git config pull.rebase false
```

6. If you try to pull now you will get an error like

```
git pull
There is no tracking information for the current branch.
Please specify which branch you want to merge with.
See git-pull(1) for details.

git pull <remote> <branch>
```

7. To solve this: fetch the code

```
git fetch
```

8. And checkout the code on the remote branch (in my case *main*)

```
git checkout main
```

9. Push your code to the remote repository

```
git push
```