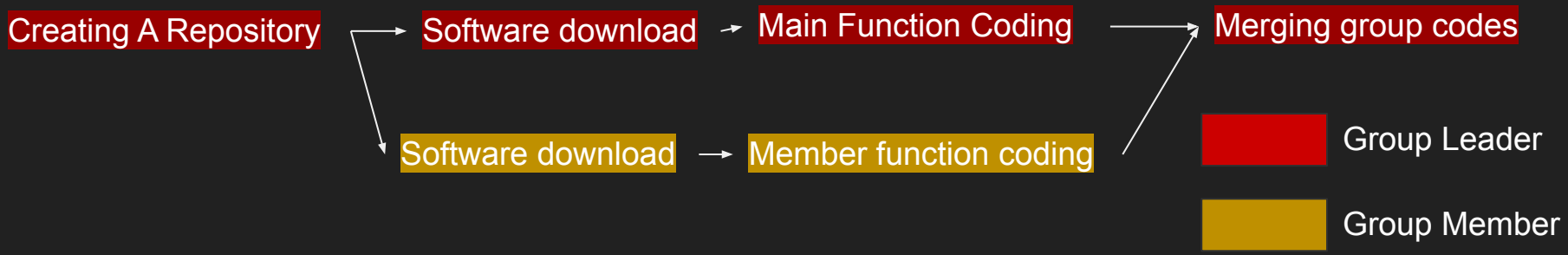
AAE2004 GitHub Project

Tutorial 1 Walkthrough

Tutorial 1 Workflow



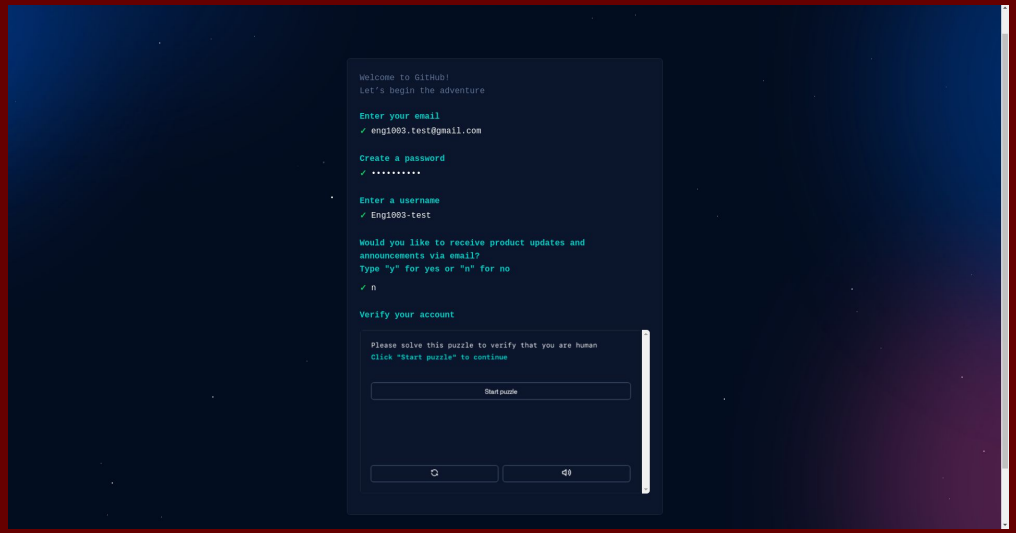
1. Initialize your GitHub project repository
2. Coding of the programming task
3. Combining the codes into one programme

- Group Leaders: Follow the red slides
- Group Members: Follow the yellow slides
- Everyone: Follow the blue slides

Initializing the GitHub Repository

1. Create your own GitHub account
2. Create a Repository for Tutorial 1
3. Invite everyone to the repository
4. Create a .py file for the repository

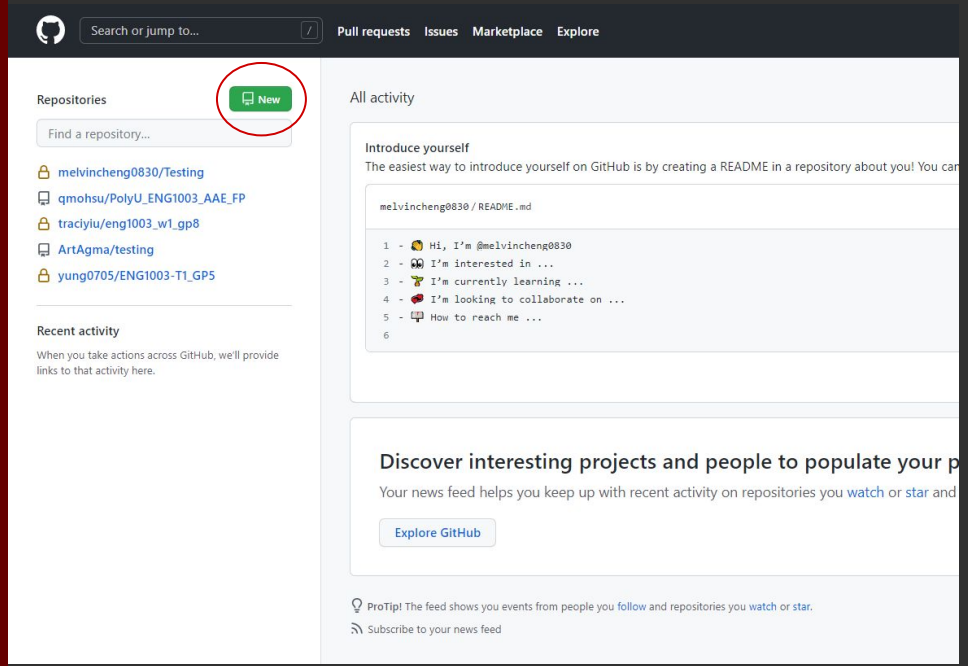
Create your own GitHub account



- Search ‘GitHub on Google
- Create your own personal GitHub account
- Receive an email confirmation
- Activate your account using the email received

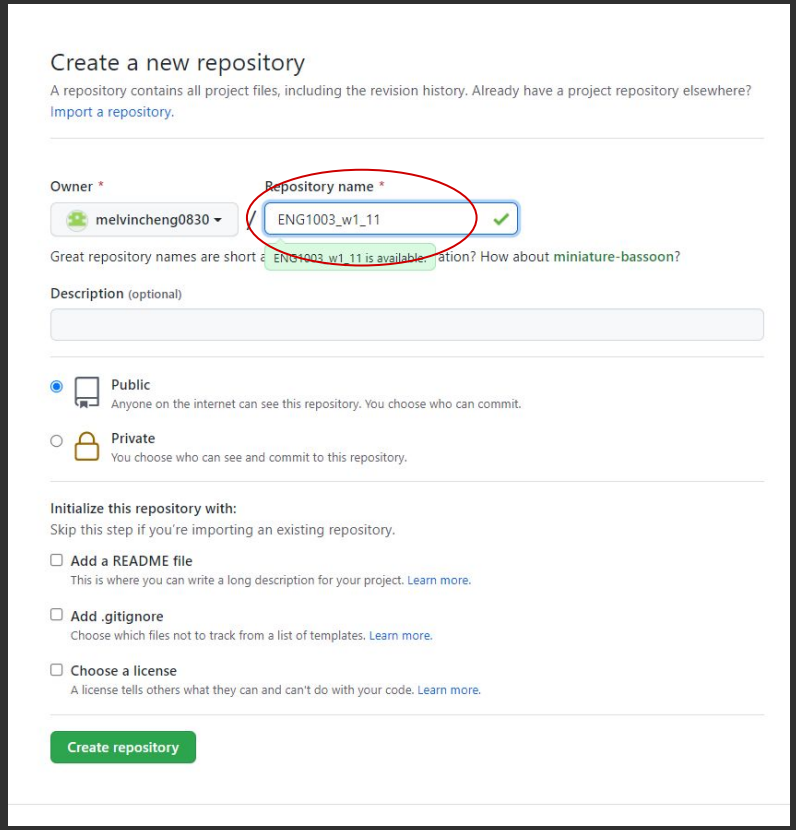
Create a Repository for Tutorial 1

- Click the new repository button once your logged into GitHub



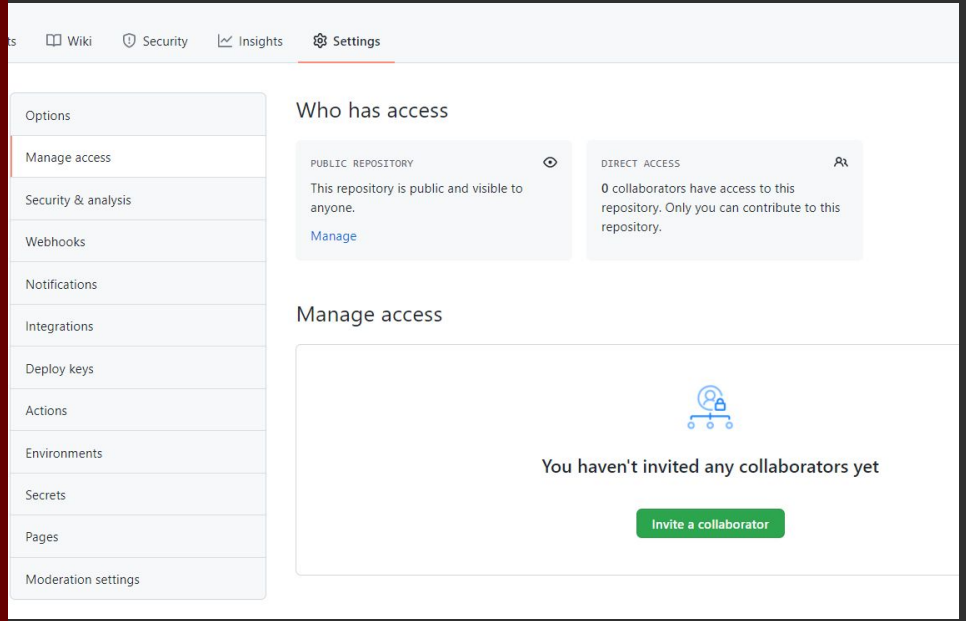
Create a Repository for Tutorial 1

- Create a new repository
- Set it public
- Give the repository a correct name



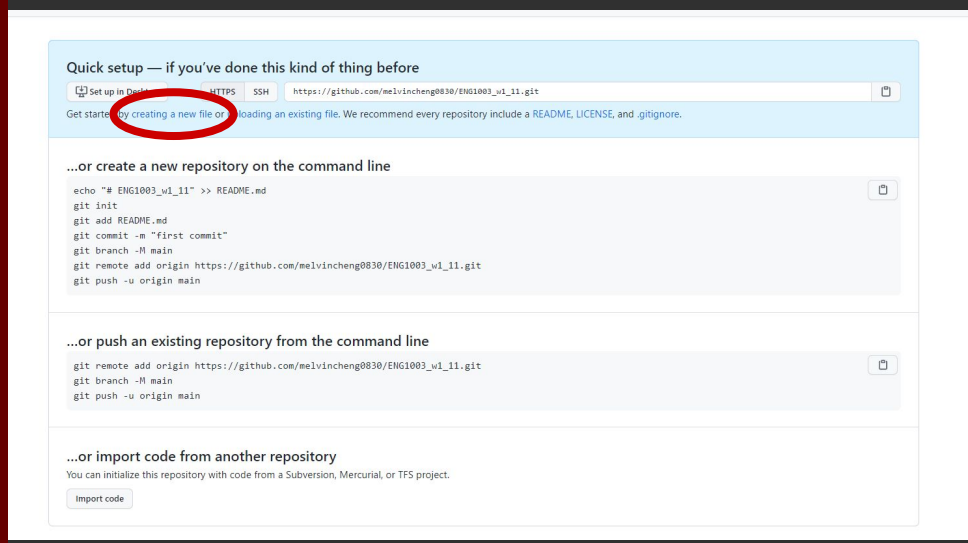
Invite everyone to your repository

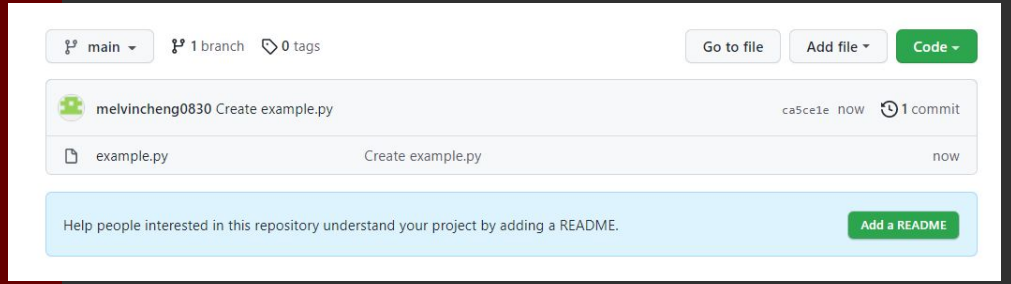
- In settings -> manage access
- Use ‘invite a collaborator to invite a new account to the repository
- Invite 4 group members and the assessor (Lecturer)
- You can find your corresponding assessor in the AAE2004’s GitHub page



Create a .py file for the repository

- Click ‘create a new file’
- Name the file with .py as ending



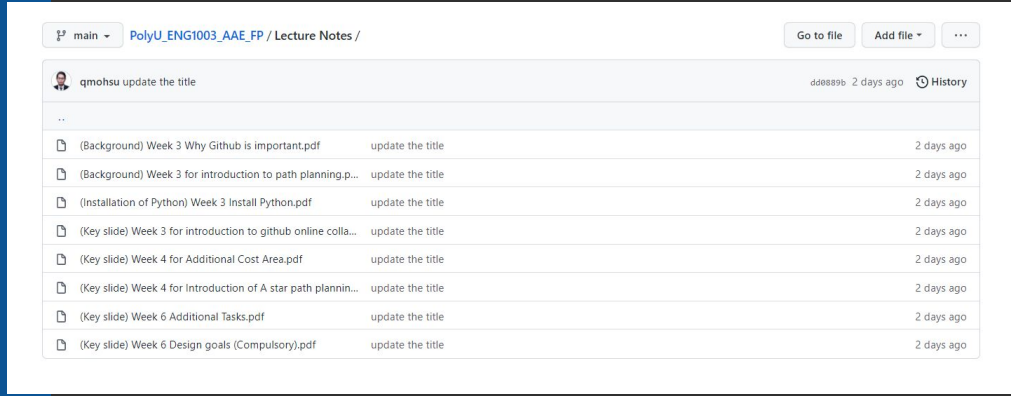


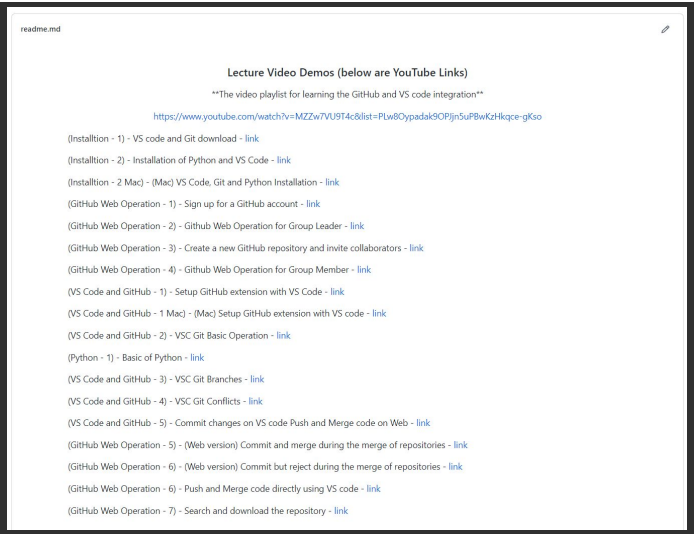
Coding of the programming Task

1. Software download
2. Create your own branch
3. Link GitHub with your local repository
4. Start Coding:
    a. For group leaders
    b. For group members
5. Create pull request

Software Download

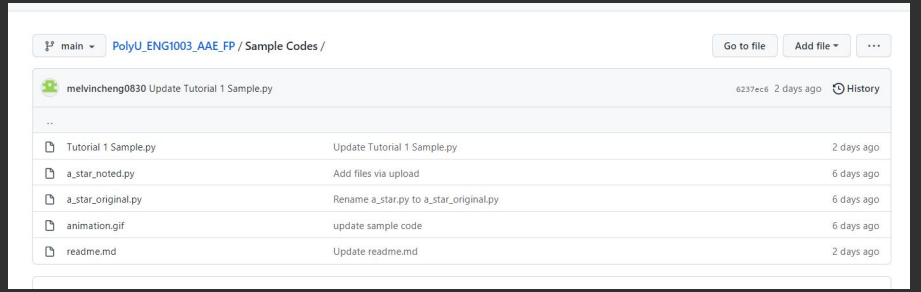
- You have to first download the following Softwares:
  - Python
  - VS Code
  - Git
- **You can find all installation tutorial under ‘Lecture Notes’ and ‘Lecture Videos’**





Coding

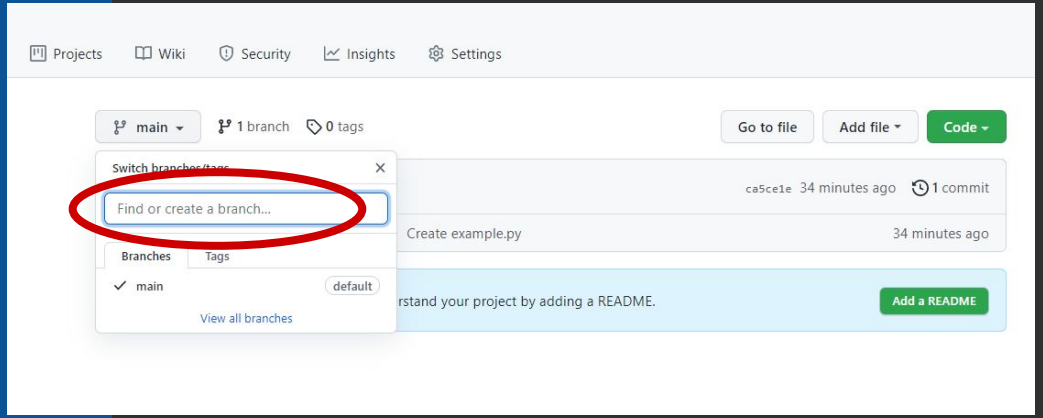
- Group Leaders:
  - Make a main function that can run 4 different functions made by members
- Group members:
  - Choose and make **ONE** function for the group leader
  - There are 4 members so there should be 4 functions made



- You can find a sample of the code ‘Tutorial 1 Sample.py’ under ‘Sample Code’

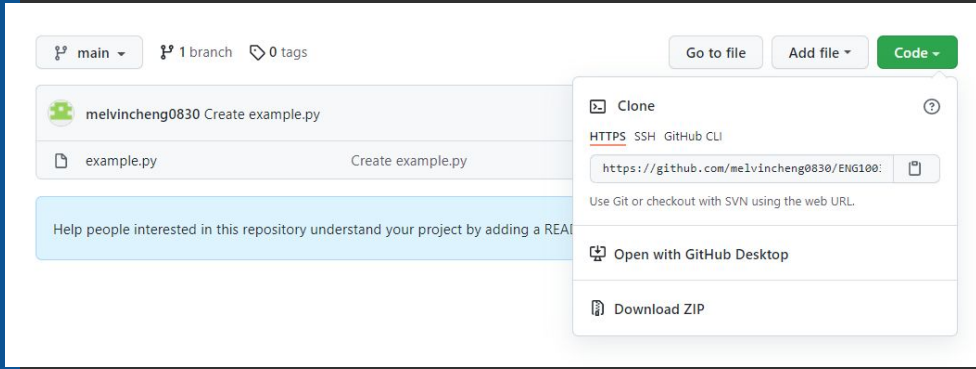
Create your own branch

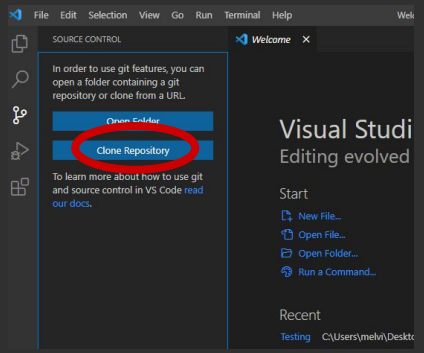
1. Go back to GitHub
2. Create your own branch



Link GitHub with your local repository

1. Copy the repository link from GitHub
2. Clone your repository to VS Code using Git Clone

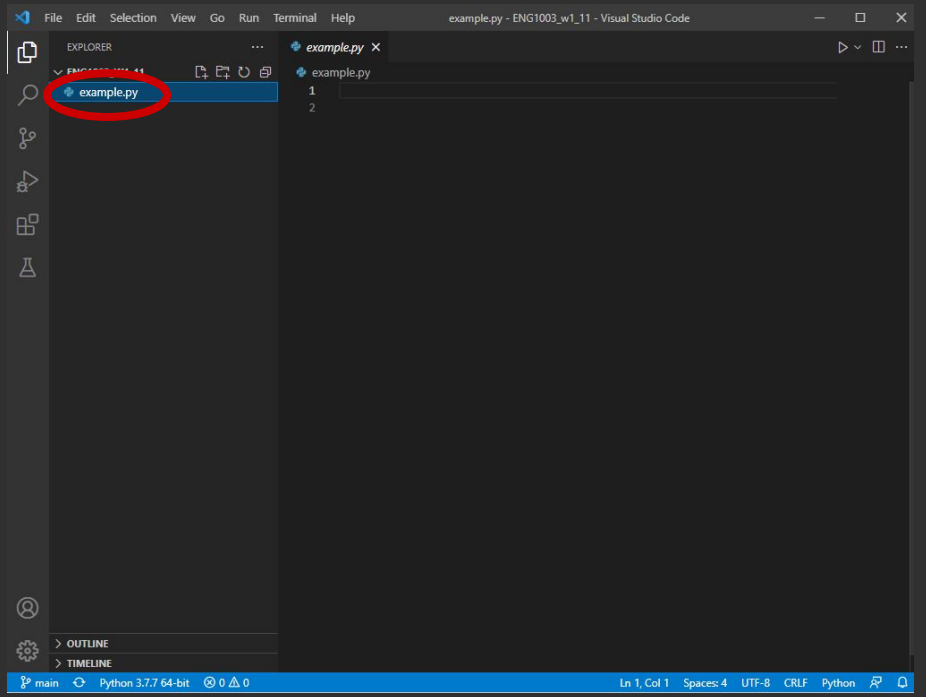




- **You can find additional tutorial under ‘Lecture Notes’ and ‘Lecture Videos’**

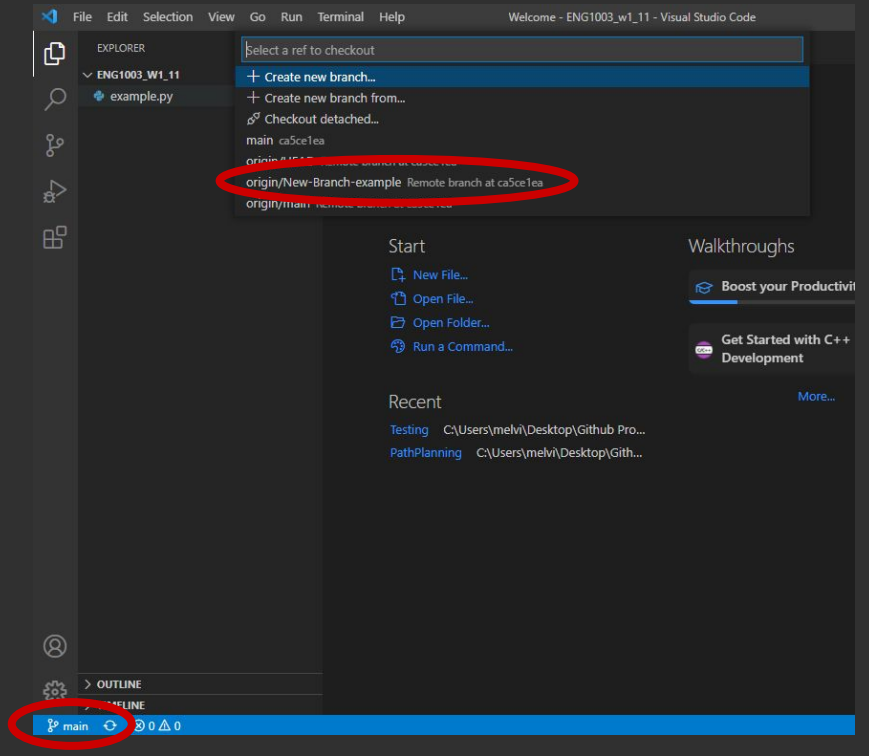
Link GitHub with your local repository

1. Cloning is successful if:
   a. You can see the file you created in GitHub
   b. You see you are in the main branch
   c. You see the repository name is the same as the one in GitHub



Switch to your own branch

1. Click the ‘main’ icon on the bottom left corner
2. Select the branch you created for yourself
3. You will see the ‘main’ icon replaced by the name of your own branch



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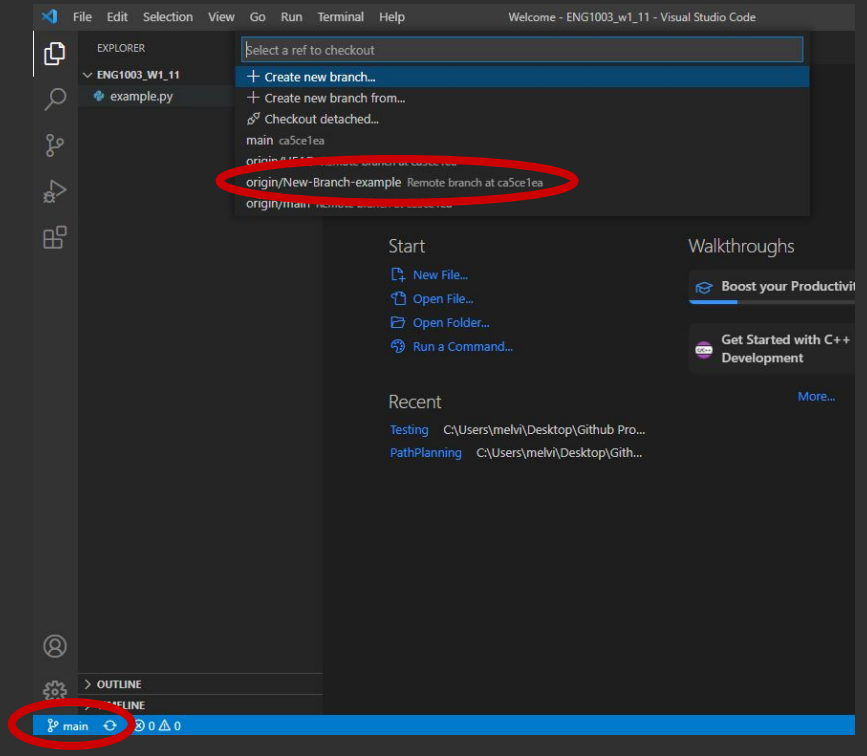
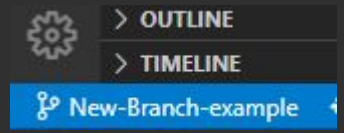
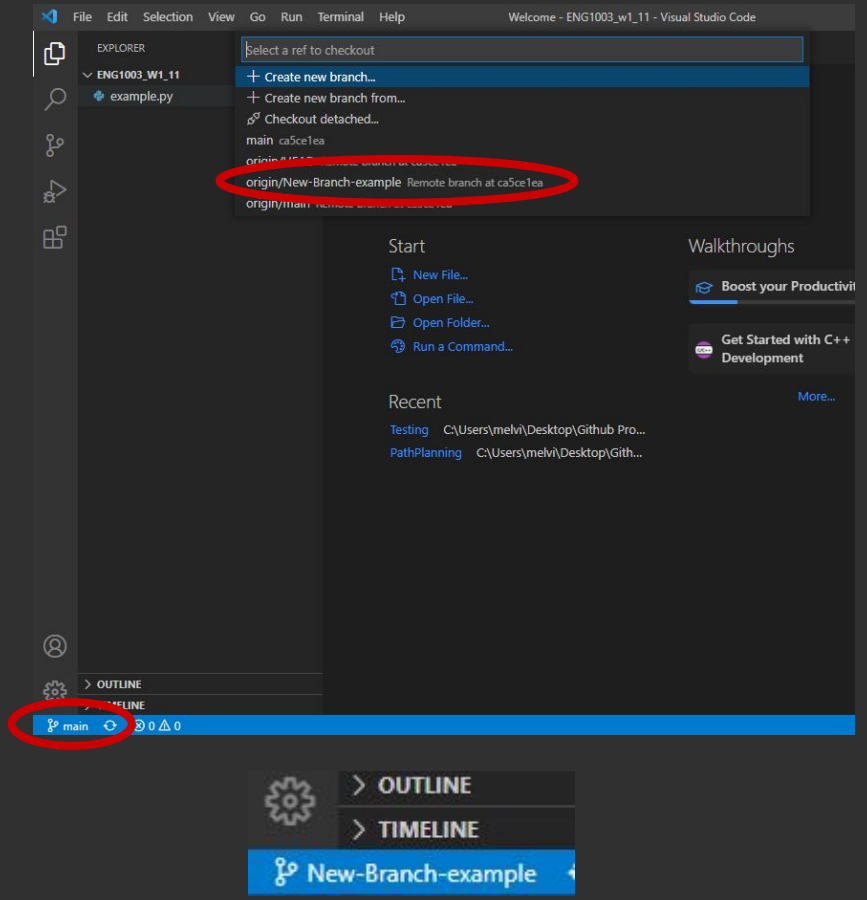




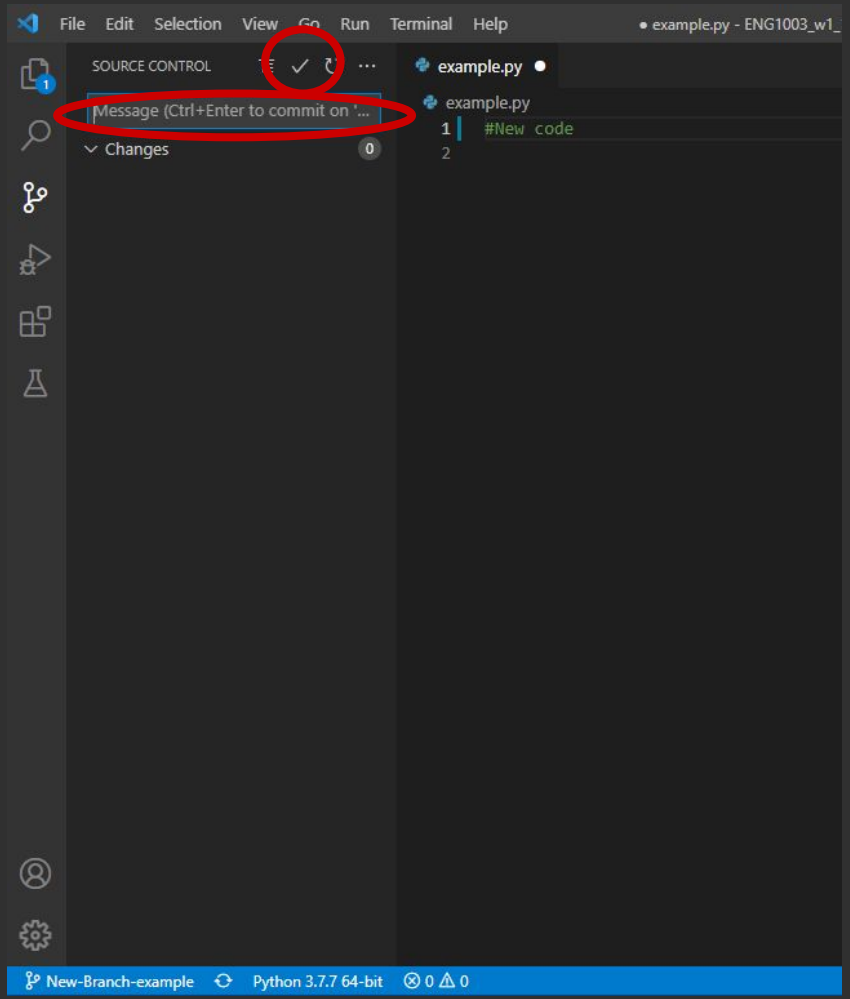
Coding

1. Edit the code once you are in your own branch



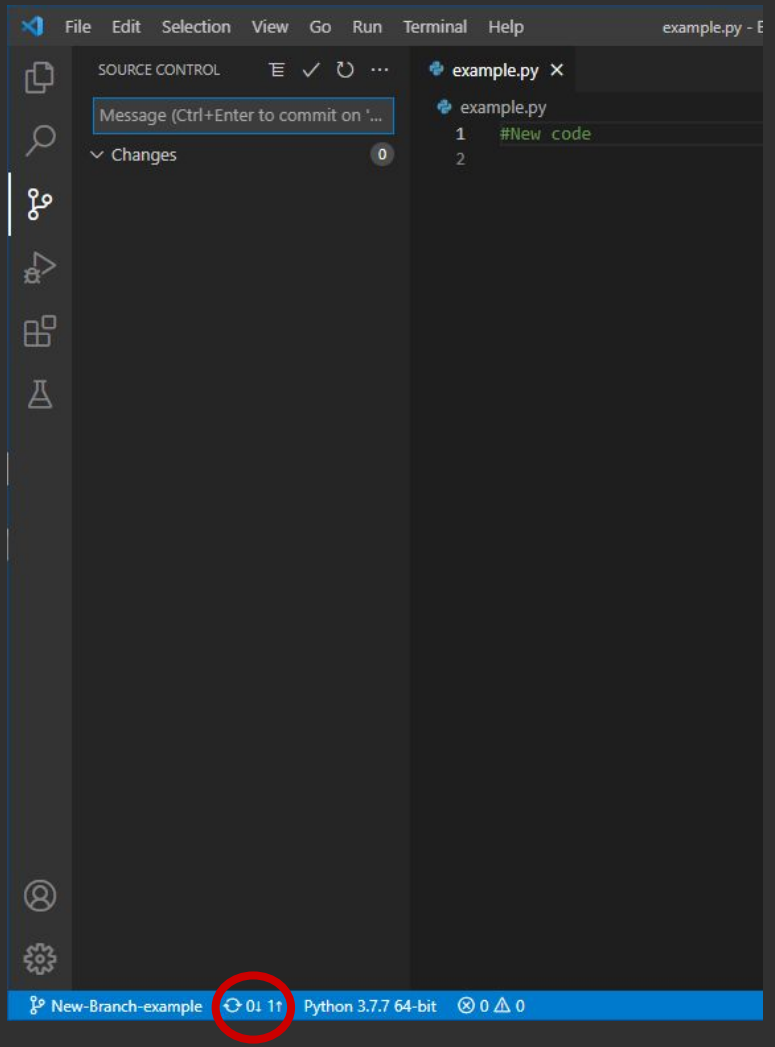
Commit Changes

1. Once you finish editing the code:
   a. Type in a commit message
   b. Click the tick button



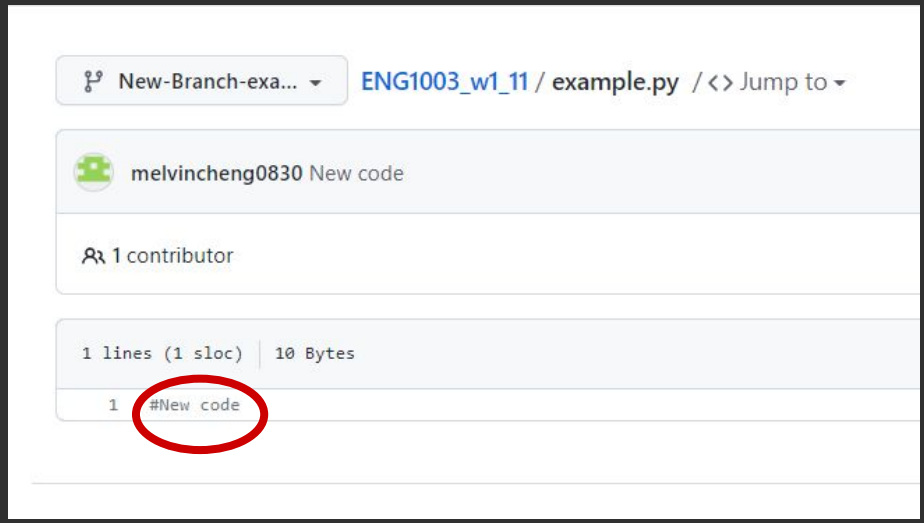
Push

1. Once you committed your changes to the local repository:
   a. Click the push button (Shown on the right)



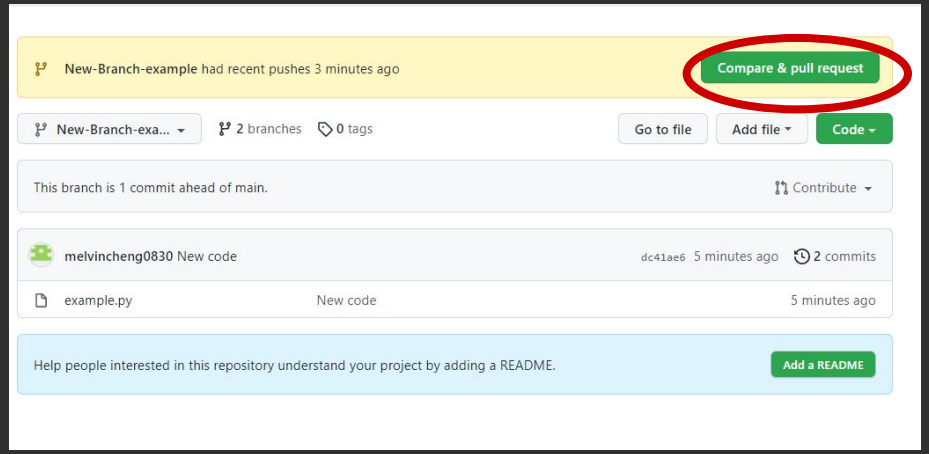
Check if push is finished

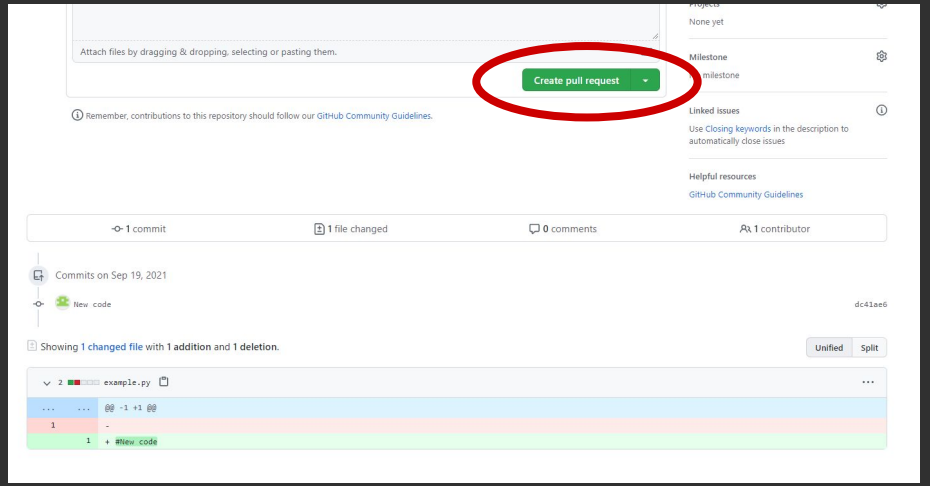
1. Go back to GitHub
2. Go to your own branch
3. See if the changes were made



Create pull request

1. Once you completed your part:
   a. Go to your branch
   b. Click compare and pull request
   c. Create a pull request





Combining the codes into one programme

1. Go to ‘pull request’
2. Manage all pull requests created for the repository
3. Press ‘merge pull request’ if you think the code is good
4. Review with your groupmates if there is any problems with the code