I'll help you understand how to work as a collaborator on the GitHub project "EL_Dsa_Collab" with branching and merging workflows. Let's break this down into step-by-step instructions.

Understanding Your Git Collaboration Workflow

For your scenario with "The_7_Problems.c" as the main branch and personal branches for each question, here's how to proceed:

1. Clone the Repository

First, you need to get a copy of the repository:

git clone https://github.com/username/EL_Dsa_Collab.git

cd EL_Dsa_Collab

2. Create Your Branch

For each problem you work on, create a branch with your name and the question number:

git checkout -b yourname/question1

This creates and switches to your new branch.

Switch to the existing branch

If the branch already exists locally, you can simply switch to it:

git checkout yourname/question1

3. Make Your Changes

Edit "The_7_Problems.c" to implement your solution for the specific question, or create a new file if that's what's required.

4. Commit Your Changes

git add .

git commit -m "Implemented solution for Question 1"

5. Push Your Branch to GitHub

git push -u origin yourname/question1

6. Create a Pull Request

The pull request is created in the GitHub account that hosts the repository - specifically in the account of the repository owner.

Since you mentioned you're a collaborator on the "EL_Dsa_Collab" repository and not the owner, you would:

1. Go to the owner's GitHub repository page (something like github.com/owner-username/EL_Dsa_Collab)

2. Navigate to the "Pull requests" tab in that repository

3. Click the "New pull request" button

4. Select your branch (yourname/question1) as the source and the main branch as the destination

5. Complete the pull request form with details about your changes

All of the pull requests, code reviews, and merge history will be visible and tracked within the owner's repository. As a collaborator, you have permission to create pull requests to that repository, but the repository itself remains under the owner's account.

This is how GitHub's collaboration model works - contributors make changes in branches and submit pull requests to the main repository, regardless of who owns it.

7. Code Review Process

The owner and other collaborators will review your code. They may:

- Leave comments

- Request changes

- Approve the changes

8. Address Review Comments

If changes are requested:

1. Make the necessary changes locally

2. Commit and push to the same branch

3. The pull request will automatically update

9. Merge Your Changes

Once approved, the owner (or you, if you have permission) can merge your changes:

1. On the pull request page, click "Merge pull request"

2. Confirm the merge

10. Update Your Local Repository

After merging, switch back to the main branch and pull the latest changes:

git checkout main

git pull origin main

11. Repeat for Each Question

For each new problem, create a new branch following the naming convention:

git checkout main # Start from the updated main branch

git checkout -b yourname/question2

...repeat steps 3-10?