**Step-by-Step Guide for the Fork-and-Pull Request Workflow:**

**1. Fork an Existing Public GitHub Repository**

* Go to GitHub and find a public repository you want to contribute to.
* Click the **Fork** button in the top-right corner of the repository page.
* This creates a copy of the repository in your GitHub account.

**2. Clone the Forked Repository to Your Local Machine**

* Open your terminal or command prompt.
* Clone your forked repository by running:

bash

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git clone https://github.com/<your-username>/<repository-name>.git

* Navigate into the repository folder:

bash

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cd <repository-name>

**3. Create a New Branch**

* Create a new branch for the feature or change you want to work on:

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git checkout -b <branch-name>

Example:

bash

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git checkout -b add-new-feature

**4. Make Modifications or Add New Features**

* Open the project in your favorite code editor (e.g., VS Code, PyCharm).
* Make the desired changes (e.g., add a new function, fix a bug, or update the README.md file).

**5. Commit Your Changes**

* Stage the changes for commit:

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git add .

* Commit the changes with a meaningful message:

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git commit -m "Added new feature to calculate factorial"

**6. Push the Branch to GitHub**

* Push the branch to your forked repository on GitHub:

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git push origin <branch-name>

Example:

bash

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git push origin add-new-feature

**7. Create a Pull Request**

* Go to your forked repository on GitHub.
* You’ll see a prompt to create a pull request for the branch you just pushed. Click **Compare & pull request**.
* Add a title and description summarizing your changes.
* Submit the pull request.

**8. Review the Pull Request**

* Collaborators or maintainers will review your pull request and provide feedback.
* To review yourself:
  + Go to the "Files changed" tab in the pull request.
  + Add comments if needed.

**9. Respond to Feedback**

* If feedback requires changes:
  + Make changes in the same branch locally.
  + Commit and push the changes:

bash

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git add .

git commit -m "Addressed feedback: fixed edge cases"

git push origin <branch-name>

**10. Merge the Pull Request**

* Once the pull request is approved, click **Merge pull request** in GitHub.
* Confirm the merge.

**11. Submit the Link and Summary**

* Copy the URL of the merged pull request.
* Write a summary of the changes you made, including how you collaborated with reviewers.