Git Exercise 2:

Building a Store Project Using Git Branches and Merging from Scratch

Objective:

The objective of this exercise is to practice using Git to collaboratively build a simple store project from scratch. Each student will work on a different feature of the store on their own branch and then merge their changes into the main branch.

Project Description:

The store project will be a simple text-based representation of a store. Each student will be responsible for a different feature such as adding products, managing inventory, handling customer data, processing orders, etc.

Instructions:

Part 1: Initialize the Repository

1. **Create a New Local Repository:**

2. **Create an Initial README:**

3. **Initial Commit:**

4. **Create a Remote Repository on GitHub:**

5. **Add the Remote Repository:**

Part 2: Adding Features with Branches

1. **Clone the Repository:**

2. **Create a New Branch:**
3. **Implement the Feature:**

Work on your assigned feature in the new branch. For example, if you are adding products, create a new file named `products.txt` and add content to it:

4. **Add and Commit Changes:**

5. **Push Changes to GitHub:**

Part 3: Create a Pull Request

1. **Create a Pull Request:**
   - Go to the repository on GitHub.
   - Click on the "Compare & pull request" button to create a pull request for your branch.
   - Provide a meaningful title and description for your pull request.
   - Submit the pull request.
2. **Review and Merge Pull Requests:**
   - The instructor or a designated reviewer will review the pull requests.
   - Once approved, the pull requests will be merged into the main branch.
3. **Update Your Local Repository:**

After your pull request is merged, update your local repository to include the latest changes:
sh
Copy code
```
git checkout main
git pull origin main
```

Example Features for the Store Project:

- **Add Products:** Create a list of products with details.
- **Manage Inventory:** Implement a feature to manage product inventory.
- **Handle Customer Data:** Create a file to manage customer information.
- **Process Orders:** Implement order processing and tracking.

Notes:

- **Branch Naming:** Use descriptive branch names that reflect the feature being worked on.
- **Pull Requests:** Ensure pull requests are reviewed and approved before merging.
- **Conflict Resolution:** Learn how to resolve merge conflicts if multiple branches modify the same part of the project.