**Step 1: Create a GitHub Repository**

1. Go to [**GitHub**](https://github.com/) and log in (or create an account if needed).
2. Click the **+** icon in the top-right corner and select **New repository**.
3. Enter a **repository name** (e.g., ci-cd-demo).
4. Select **Public** (for easier access) or **Private** (if preferred).
5. Check **"Add a README file"** to initialize the repo.
6. Click **"Create repository"**.

**Step 2: Clone the Repository Locally**

1. Click the **"Code"** button in your GitHub repo and copy the HTTPS URL.
2. Open a terminal (Mac/Linux) or Git Bash (Windows).
3. Run the following command to clone the repository to your local machine:

**git clone https://github.com/YOUR\_USERNAME/ci-cd-demo.git**

1. Navigate into the project directory:

**cd ci-cd-demo**

**Step 3: Create a Simple Python Application (Optional)**

1. Inside the **ci-cd-demo** folder, create a new file named app.py:

**touch app.py**

1. Open the file and add the following simple Python script:

def hello():

return "Hello, DevOps!"

if \_\_name\_\_ == "\_\_main\_\_":

print(hello())

1. Save and close the file.

**Step 4: Create a GitHub Actions Workflow for CI**

1. In the **ci-cd-demo** folder, create the following directory structure:

**mkdir -p .github/workflows**

1. Inside the workflows folder, create a new file named ci.yml:

**touch .github/workflows/ci.yml**

1. Open the file and add the following YAML script to define a simple CI pipeline:

<https://github.com/cxyix/devopslabs/blob/main/ci.yaml>

1. Save and close the file.

**Step 5: Commit and Push Changes to GitHub**

1. Stage all changes:

**git add .**

1. Commit the changes:

**git commit -m "Added CI/CD pipeline with GitHub Actions"**

1. Push the changes to GitHub:

**git push origin main**

**Step 6: Verify CI Pipeline Execution on GitHub**

1. Go to your repository on **GitHub**.
2. Click on the **"Actions"** tab.
3. You should see the **CI Pipeline running**.
4. If everything is set up correctly, it will show a **green checkmark ✅** when the pipeline completes successfully.