LAB Report | MLOps Deployment from PROD to DEV

1. Objective:

This report summarizes the steps followed to set up the environment and deploy the project. It also addresses challenges faced during the process and how they were overcome.

2. Steps Followed:

1. **Forking the Repository:**
    - The first step was forking the project repository to my GitHub account to create a personal copy for development.
2. **Cloning the Repository:**
    - Once the repository was forked, I used Git to clone it to my local machine using the following command:

      `git clone <repository-url>`
3. **Creating a Virtual Environment:**
    - I used Anaconda to create a new virtual environment to isolate the project dependencies. This ensures there are no conflicts with other Python projects.
    - The command used was:

      `conda create --name myenv python=3.x`
4. **Installing Dependencies:**
    - After creating the environment, I navigated to the project directory and installed the dependencies listed in the requirements.txt file using the command:

      `pip install -r requirements.txt`
5. **Activating the Virtual Environment:**
    - After installing the required dependencies, I activated the virtual environment using:

      conda activate myenv
    - It was important to ensure that the correct environment was active when running the project.
6. **Running the Project:**
    - Once the environment was set up and activated, I ran the project code to ensure that it executed without errors.
    - If there were any issues, I verified the environment setup and dependency installations.

3. Conclusion:

The process of setting up the environment and deploying the project involved forking the repository, cloning it, creating a virtual environment, and installing the necessary dependencies. The key challenges faced were version conflicts, missing dependencies, and ensuring the correct environment was activated. These issues were resolved through careful attention to dependencies and environment management. The project was successfully run once all setup steps were completed.