Beginner Exercise: Build a GitHub Actions Pipeline (Node.js Setup)



You will create a GitHub Actions pipeline with the following steps and commands, based on the requirements provided below.

Requirements

1. Trigger: Manual Workflow

• The pipeline must only run manually using the workflow_dispatch trigger. This allows you to manually start the workflow from the GitHub web interface.

2. Joh

• You need one job that runs on an Ubuntu virtual machine using ubuntu-latest as the runner.

3. Steps

- Step 1: Use the actions/checkout@v4 action to checkout the repository code.
- Step 2: Use the actions/setup-node@v3 action to set up Node.js version 20.
- Step 3: Add a run step to print the versions of Node.js and npm using the following commands:
 - o node --version
 - o npm --version



Commands and Actions to Use

Here are the **specific commands and actions** you need to use in your pipeline:

1. Checkout Repository Code

You'll use actions/checkout@v4 to get your code on the GitHub runner.

- name: Checkout code uses: actions/checkout@v4

2. Set up Node.js 20

You'll use actions/setup-node@v3 to install Node.js version 20.

```
- name: Set up Node.js
uses: actions/setup-node@v3
with:
   node-version: '20'
```

3. Check Node.js and npm Versions

In this step, you'll run the necessary commands to check the versions of **Node.js** and **npm** installed on the runner.

```
- name: Check Node.js and npm versions
run: |
  node --version
  npm --version
```

The node --version command will print the **installed Node.js version**, and npm --version will print the **installed npm version**.