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.

Block-based

1. Trigger: Manual Workflow

• The pipeline must only run manually using the workflow_dispatch trigger.

2. Job

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

3. Steps

- **Step 1**: Use a *command* with the actions/checkout@v4 *tool* to **check out** the repository code.
- **Step 2**: Use a *command* with the actions/setup-node@v3 *tool* and a *parameter* node-version: '20'.
- Step 3: Add a *command* to **print the versions** of Node.js and npm using the following command with the *tool* node and the parameter --version.

4. Results

• When running the *pipeline*, you should expect a **success** message.

K GitHub Actions

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 versionsrun: node --version
```

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

4. Results

• When running the *pipeline*, you should expect a **success** message.