**1. Define the Inventory**

First, update the Ansible inventory to include the nodes and their labels. The inventory file will be divided into groups test and prod.

**Create or update /etc/ansible/hosts (or your inventory file):**

[test]

Slave1 ansible\_ssh\_host=<slave ip address>

Slave2 ansible\_ssh\_host==<slave ip address>

[prod]

Slave3 ansible\_ssh\_host=<slave ip address>

Slave4 ansible\_ssh\_host=<slave ip address>

**2. Create Ansible Roles**

Create two roles: one for installing Java and another for installing MySQL.

**Role for Installing Java**

**Create Role Directory Structure:**

**mkdir -p roles/java/tasks**

**Create roles/java/tasks/main.yml:**

---

- name: Update package index

  apt:

    update\_cache: yes

- name: Install Java

  apt:

    name: openjdk-11-jdk

    state: present

- name: Ensure Java installation is successful

  command: java -version

**Role for Installing MySQL**

**Create Role Directory Structure:**

**mkdir -p roles/mysql/tasks**

**Create roles/mysql/tasks/main.yml:**

---

- name: Update package index

  apt:

    update\_cache: yes

- name: Install MySQL Server

  apt:

    name: mysql-server

    state: present

- name: Ensure MySQL service is running

  service:

    name: mysql

    state: started

    enabled: yes

- name: Verify MySQL installation

  command: mysql --version

**3. Create the Main Playbook**

Create a playbook to apply the roles to the appropriate nodes.

**Create site.yml:**

---

- name: Install Java on test nodes

  hosts: test

  become: yes

  roles:

    - java

- name: Install MySQL on prod nodes

  hosts: prod

  become: yes

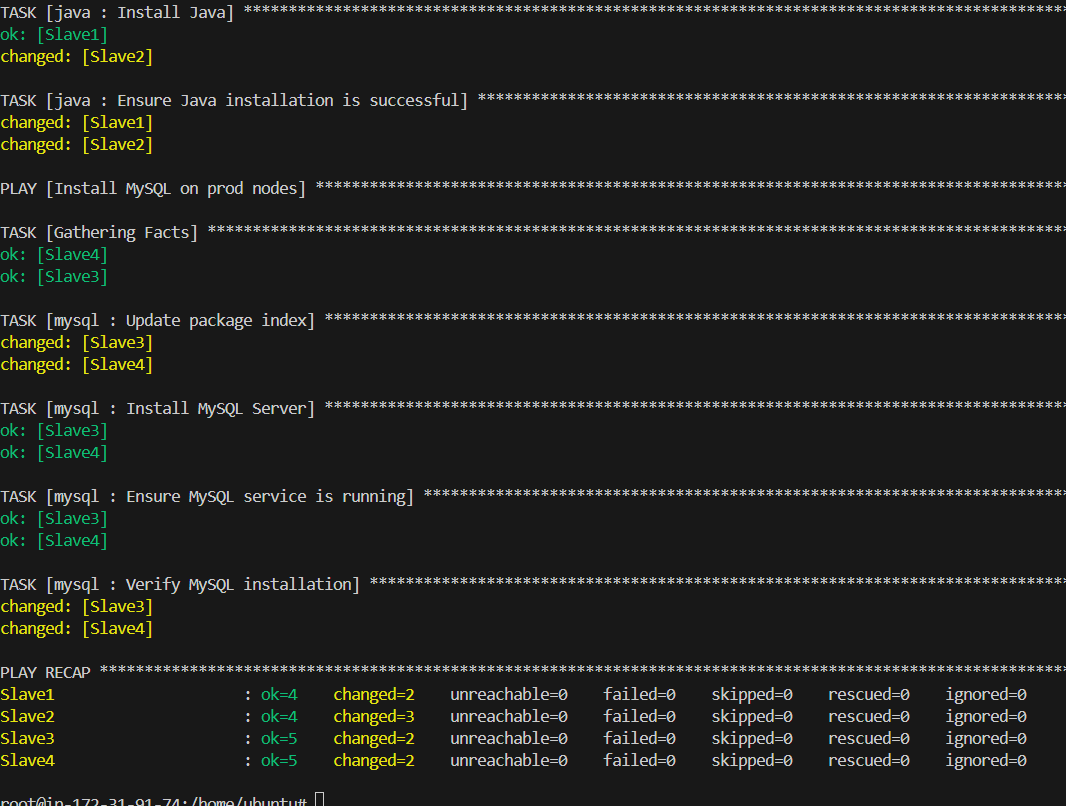
  roles:

    - mysql

**4. Run the Ansible Playbook**

Execute the playbook to apply the roles to the nodes:

**ansible-playbook site.yml**

****