

Q6 ANSIBLE ABDUL SAMIM

1. The reason for error is that the python3 package name does not exist or is not available in the package manager on server2.

This can happen due to a number of reasons such as different linux distributions, system's package cache is outdated or minimal installations.

2. We can use Ansible facts, specifically `ansible_os_family` and `ansible_distribution` to conditionally install the correct package name based on the linux distribution.

3.

```
GNU nano 6.2 snippet.yaml
- name: Ensure Python 3 is installed on any Linux distro
  hosts: all
  become: yes
  tasks:
    - name: Install Python 3 on Debian/Ubuntu
      apt:
        name: python3
        state: present
        update_cache: yes
      when: ansible_os_family == "Debian"
    - name: Install Python 3 on RedHat/CentOS/AlmaLinux/Rocky
      yum:
        name: python3
        state: present
      when: ansible_os_family == "RedHat"
    - name: Install Python 3 on SUSE
      zypper:
        name: python3
        state: present
      when: ansible_os_family == "Suse"
```