In this lab exercise you will use below hosts. Please note down some details about these hosts as given below :

student-node :- This host will act as an Ansible master node where you will create playbooks, inventory, roles etc and you will be running your playbooks from this host itself.

node01 :- This host will act as an Ansible client/remote host where you will setup/install some stuff using Ansible playbooks. Below are the SSH credentials for this host:

User: bob

Password: caleston123

node02 :- This host will also act as an Ansible client/remote host where you will setup/install some stuff using Ansible playbooks. Below are the SSH credentials for this host:

User: bob

Password: caleston123

Can we define variables in an Ansible inventory file? Yes

Can we define variables in an Ansible playbook? Yes

Which of the following formats is used to call a variable in an Ansible playbook? {{ variable_name }}

The /home/bob/playbooks/playbook.yaml playbook is adding a name server entry in resolv.conf file on localhost. The name server information is already added to the /home/bob/playbooks/inventory file as a variable called nameserver_ip.

Replace the hardcode ip address of the name server in this playbook to use the value from the variable defined in the inventory file.

Note: You need not to execute this playbook as of now.

```
[bob@student-node playbooks]$ cat inventory
localhost ansible_connection=local nameserver_ip=8.8.8.8 snmp_port=160-161
node01 ansible_host=node01 ansible_ssh_pass=caleston123
node02 ansible_host=node02 ansible_ssh_pass=caleston123
[web_nodes]
node01
node02

[bob@student-node playbooks]$ vi playbook.yaml
[bob@student-node playbooks]$ cat playbook.yaml
---
- name: 'Add nameserver in resolv.conf file on localhost'
  hosts: localhost
  become: yes
  tasks:
    - name: 'Add nameserver in resolv.conf file'
      lineinfile:
        path: /etc/resolv.conf
        line: 'nameserver {{ nameserver_ip }}'

[bob@student-node playbooks]$
```

Activate Wi
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We have updated the /home/bob/playbooks/playbook.yaml playbook to add a new task to disable SNMP port on localhost. However, the port is hardcoded in the playbook. Update the playbook to replace the hardcode value of the SNMP port to use the value from the variable named snmp_port, defined in the inventory file.

```
[bob@student-node playbooks]$ cat inventory
localhost ansible_connection=local nameserver_ip=8.8.8.8 snmp_port=160-161
node01 ansible_host=node01 ansible_ssh_pass=caleston123
node02 ansible_host=node02 ansible_ssh_pass=caleston123
[web_nodes]
node01
node02

[bob@student-node playbooks]$ cat playbook.yaml
---
- name: 'Add nameserver in resolv.conf file on localhost'
  hosts: localhost
  become: yes
  tasks:
    - name: 'Add nameserver in resolv.conf file'
      lineinfile:
        path: /etc/resolv.conf
        line: 'nameserver {{ nameserver_ip }}'
    - name: 'Disable SNMP Port'
      firewalld:
        port: '{{ snmp_port }}'
        permanent: true
        state: disabled
[bob@student-node playbooks]$
```

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We have reset the /home/bob/playbooks/playbook.yaml playbook. Its printing some personal information of an employee. We would like to move the car_model, country_name and title values to the respective variables, and these variables should be defined at the play level.

Add three new variables named car_model, country_name and title under the play and move the values over there. Use these variables within the task to remove the hardcoded values.

```
[bob@student-node playbooks]$ cat playbook.yaml
---
- hosts: localhost
  vars:
    car_model: 'BMW M3'
    country_name: USA
    title: 'Systems Engineer'
  tasks:
    - command: 'echo "My car is {{ car_model }}"'
    - command: 'echo "I live in the {{ country_name }}"'
    - command: 'echo "I work as a {{ title }}"'
[bob@student-node playbooks]$ 
```

```
[bob@student-node playbooks]$ ansible-playbook -i inventory playbook.yaml

PLAY [localhost] ***********************************************************

TASK [Gathering Facts] *****************************************************
ok: [localhost]

TASK [command] *************************************************************
changed: [localhost]

TASK [command] *************************************************************
changed: [localhost]

TASK [command] *************************************************************
changed: [localhost]

PLAY RECAP *****************************************************************
localhost                  : ok=4    changed=3    unreachable=0    failed=0
escued=0     ignored=0
```