

Solution to Question

```
[Webserver]
Server[a:d].lab.example.com

[Raleigh]
server[a:b].lab.example.com

[Mountain_View]
serverc.lab.example.com

[London]
serverd.lab.example.com

[Development]
servera.lab.example.com

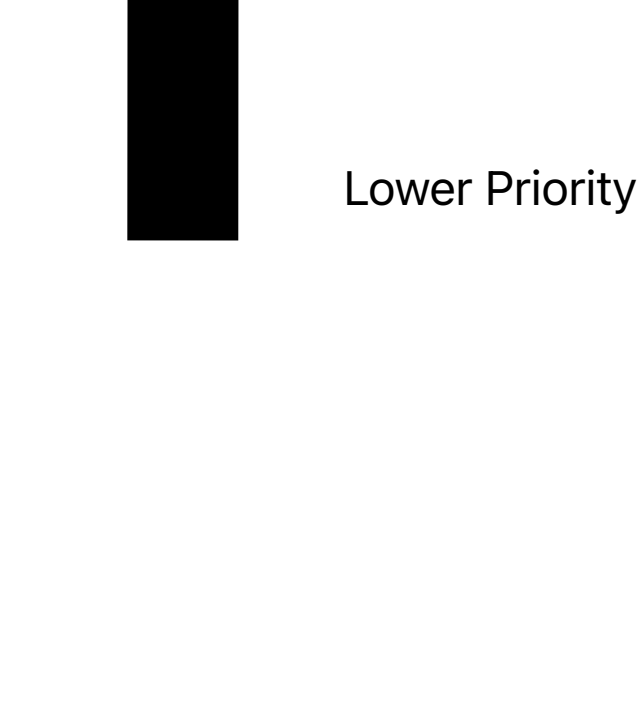
[Testing]
serverb.lab.example.com

[Production]
server[c:d].lab.example.com

[us:children]
Raleigh
Mountain_View
```

ansible.cfg Presendence

1. If you define the Environment Variable "ANSIBLE_CONFIG="
2. Search for **ansible.cfg** in present working directory
3. It will search for .ansible.cfg in present working directory
4. Then consider the global config file (/etc/ansible/ansible.cfg)



Privilege Escalation

-b : become (apply sudo while running task)

-k : Prompt for SSH password

-K : Prompt for Sudo Password

For Permanent Entry:

```
[defaults]

inventory= /home/control/ansible/inventory

[privilege_escalation]
become=True
become_method=sudo
become_user=root
become_ask_pass=False
~
```

PlayBook

A file to write the Desired state of managed nodes
A collection of plays

Play:

A set of tasks to be executed on a particular host or set of hosts

YAML

YAML Ain't Markup Language
Yet Another Markup Language

Extensions:
.yaml
.yml

LIST

Ordered sequence of related objects

Fruits

- Apple
- Banana
- Mango
- Grapes

When you want to define multiple values of a single key, we use list

DICTIONARY

Unordered sequence of defining a single object

Person:

Name: Ansible
Age: 9 yrs
Hometown: USA

When you want to define properties of an object, we use dictionary

DICTIONARY IN A LIST

Fruits

- Apple:
Calories: 445kcal
Protein: 2.2g
Fat: 1.3g
- Banana
- Mango:
Calories: 322kcal
Fat: 2.5g
- Grapes

LIST IN A DICTIONARY

Person:

Name: Ansible
Age: 9 yrs
Hometown: USA
Hobbies:
- Configuration management
- Automation
- Fast
- Secure
Parents: RedHat

QUERY

I want value of the Calories of Mango == Fruits[2].Calories == 322kcal
I want value of Protein in Apple == Fruits[0].Protein == 2.2g

QUERY

I want value of the 3rd Hobby of Ansible == Person.Hobbies[2] == Fast
I want the Parents information of Ansible == Person.Parents == RedHat

ansible-playbook <name_of_playbook>.yaml

```
---
- name: First Play of First Playbook
  hosts: all
  tasks:
    - name: Install a package
      dnf:
        name: php
        state: present

    - name: Create a User
      user:
        name: abcd

    - name: Start a service
      service:
        name: php
        state: started

- name: Second Play of First Playbook
  hosts: prod
  tasks:
    - copy:
        src: newfile.txt
        dest: /
```

YAML

Vs.

JSON

```
---
- name: First Play of First Playbook
  hosts: all
  tasks:
    - name: Install a package
      dnf:
        name: php
        state: present
    - name: Create a User
      user:
        name: abcd
    - name: Start a service
      service:
        name: httpd
        state: started
```

```
- name: Second Play of First Playbook
  hosts: prod
  tasks:
    - copy:
        src: newfile.txt
        dest: /
```

```
{
  {
    "name": "First Play of First Playbook",
    "hosts": "all",
    "tasks": [
      {
        "name": "Install a package",
        "dnf": {
          "name": "php",
          "state": "present"
        }
      },
      {
        "name": "Create a User",
        "user": {
          "name": "abcd"
        }
      }
    ]
  },
  {
    "name": "Second Play of First Playbook",
    "hosts": "prod",
    "tasks": [
      {
        "copy": {
          "src": "newfile.txt",
          "dest": "/"
        }
      }
    ]
  }
}
```

Ignore Errors

```
- name: Install a package
  dnf:
    name: pp
    state: present
  ignore_errors: true
```

Ansible Tags

ansible-playbook play2.yml --tags=new_content

ansible-playbook play2.yml --skip-tags=new_content

```
---
- name: New playbook
  hosts: all
  tasks:
    - name: Add line in file
      lineinfile:
        path: /newfile.txt
        line: "WE ADDED A LINE"
      tags:
        - new_content
        - my_tasks

    - name: Install Haproxy
      dnf:
        name: haproxy
        state: present
      tags:
        - my_tasks

    - name: user creation
      user:
        name: newuser
      tags:
        - my_tasks

- hosts: prod
  tasks:
    - copy:
        src: content.txt
        dest: /home/content.txt
```

RAAP 2.0

Red Hat Ansible Automation Platform 2.0

Ansible Core + Ansible Content Collections + Ansible Content Navigator + Ansible Execution Environments

FQCN
Fully Qualified Collection Name

Ansible Navigator
TUI (Text User Interface)

