Ansible:-

Installation:-

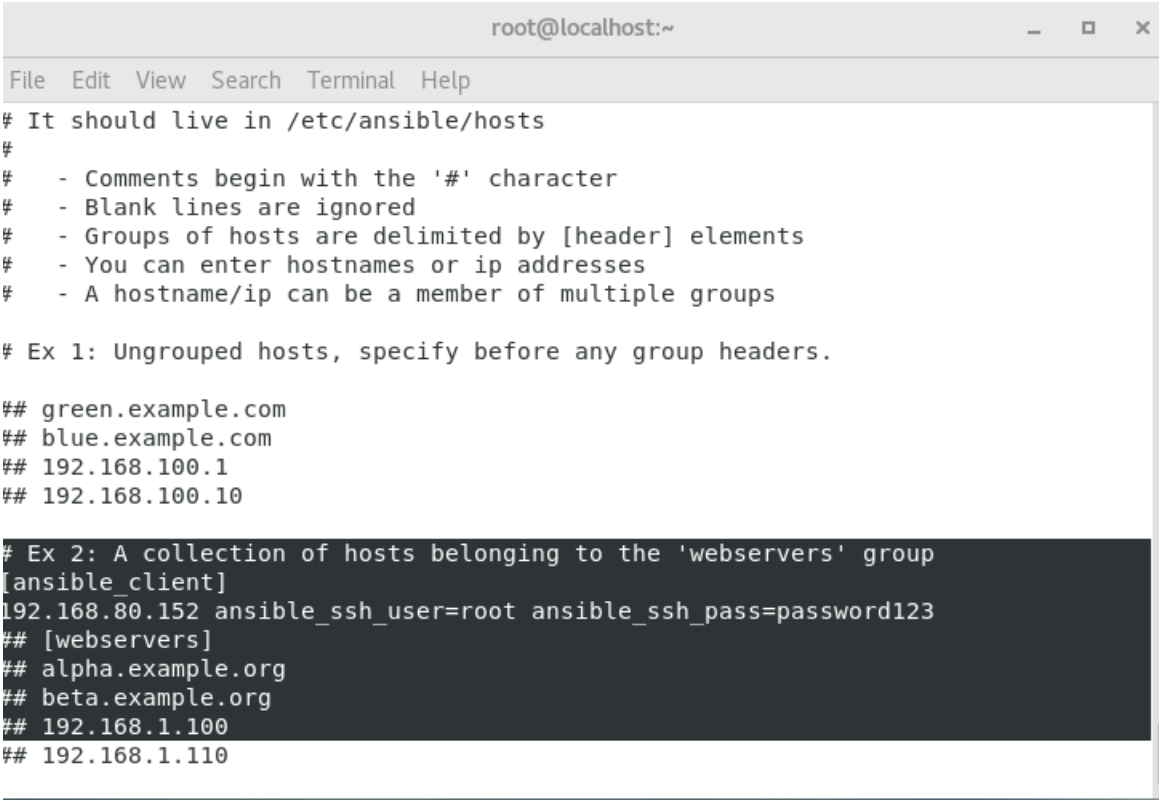
yum install epel-release

yum install ansible -y

#cat /etc/ansible/hosts

[ansible_client]

192.168.80.152 ansible_ssh_user=root ansible_ssh_pass=password123



vim sample.yaml

- name: sample book

  hosts: ansible_client

  become: true

  tasks:

    - name: installing httpd

      yum:

          name: httpd

state: latest

- name: running httpd

service:

name: httpd

state: started

- name: creating content

copy:

content: "Congrats on Installing ansible"

dest: /var/www/html/index.html

```yaml
---
- name: sample book
  hosts: ansible_client
  become: true
  tasks:
    - name: installing httpd
      yum:
          name: httpd
          state: latest
    - name: running httpd
      service:
              name: httpd
              state: started
    - name: creating content
      copy:
            content: "Congrats on Installing ansible"
            dest: /var/www/html/index.html
```

To check syntax:-

ansible-playbook sample.yml --syntax-check

playbook: sample.yml

```
[root@localhost ~]# ansible-playbook sample.yml --syntax-check

playbook: sample.yml
[root@localhost ~]# ansible-playbook sample.yml

PLAY [sample book] ************************************************************

TASK [Gathering Facts] ********************************************************
fatal: [192.168.80.152]: FAILED! => {"msg": "Using a SSH password instead of a key is not possible becau
se Host Key checking is enabled and sshpass does not support this.  Please add this host's fingerprint t
o your known_hosts file to manage this host."}

PLAY RECAP ********************************************************************
192.168.80.152             : ok=0    changed=0    unreachable=0    failed=1    skipped=0    rescued=0
 ignored=0
```

First take ssh of client , so server will have fingerprint of client. Then run playbook.

```
[root@localhost ~]# ansible-playbook sample.yml

PLAY [sample book] ************************************************************************************

TASK [Gathering Facts] ********************************************************************************
ok: [192.168.80.152]

TASK [installing httpd] *******************************************************************************
changed: [192.168.80.152]

TASK [running httpd] **********************************************************************************
changed: [192.168.80.152]

TASK [creating content] *******************************************************************************
changed: [192.168.80.152]

PLAY RECAP ********************************************************************************************
192.168.80.152             : ok=4    changed=3    unreachable=0    failed=0    skipped=0    rescued=0
 ignored=0
```

Running a Script on all client: -

cat calc.sh

#!/bin/bash

#read -p "Enter a number:" num1

num1=$1

#read -p "Enter a smaller number:" num2

num2=$2

#read -p "Enter an operand:" op

op="$3"

echo $op

if [["$op" == "+"]]

then

```
    echo "$num1 + $num2 = $((num1 + num2))"
elif [[ "$op" == "-" ]]
then
    echo "$num1 - $num2 = $((num1 - num2))"
elif [[ "$op" == "*" ]]  # Corrected the condition for multiplication
then
    echo "$num1 * $num2 = $((num1 * num2))"
elif [[ $op == / ]]
then
    echo "$num1 / $num2 = $((num1 / num2))"
else
    echo "Operator not listed"
fi

# ansible ansible_client -m script -a "calc.sh 12 12 +"
192.168.80.128 | CHANGED => {
    "changed": true,
    "rc": 0,
    "stderr": "Shared connection to 192.168.80.128 closed.\r\n",
    "stderr_lines": [
        "Shared connection to 192.168.80.128 closed."
    ],
    "stdout": "+\r\n12 + 12 = 24\r\n",
    "stdout_lines": [
        "+",
        "12 + 12 = 24"
    ]
```

ansible_client → Group name

-m : module