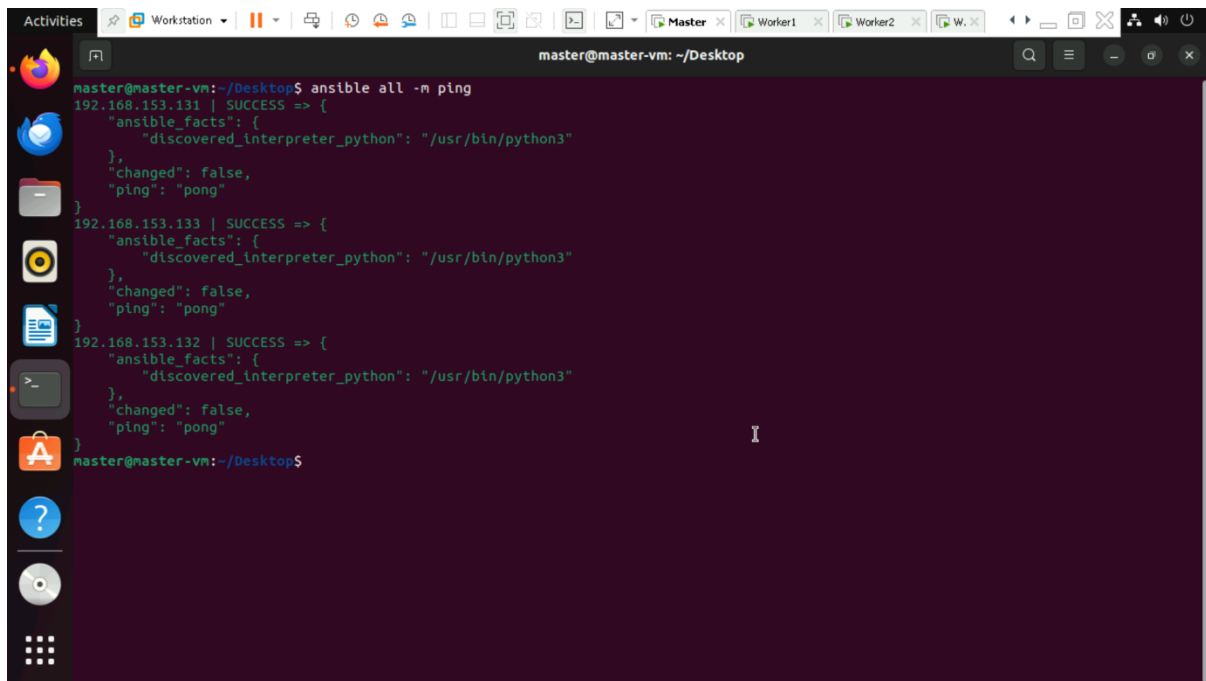


## Q. Ansible playbook automation

[devops-commontrack-mocktest/question4](#) at main · KPkm25/devops-commontrack-mocktest

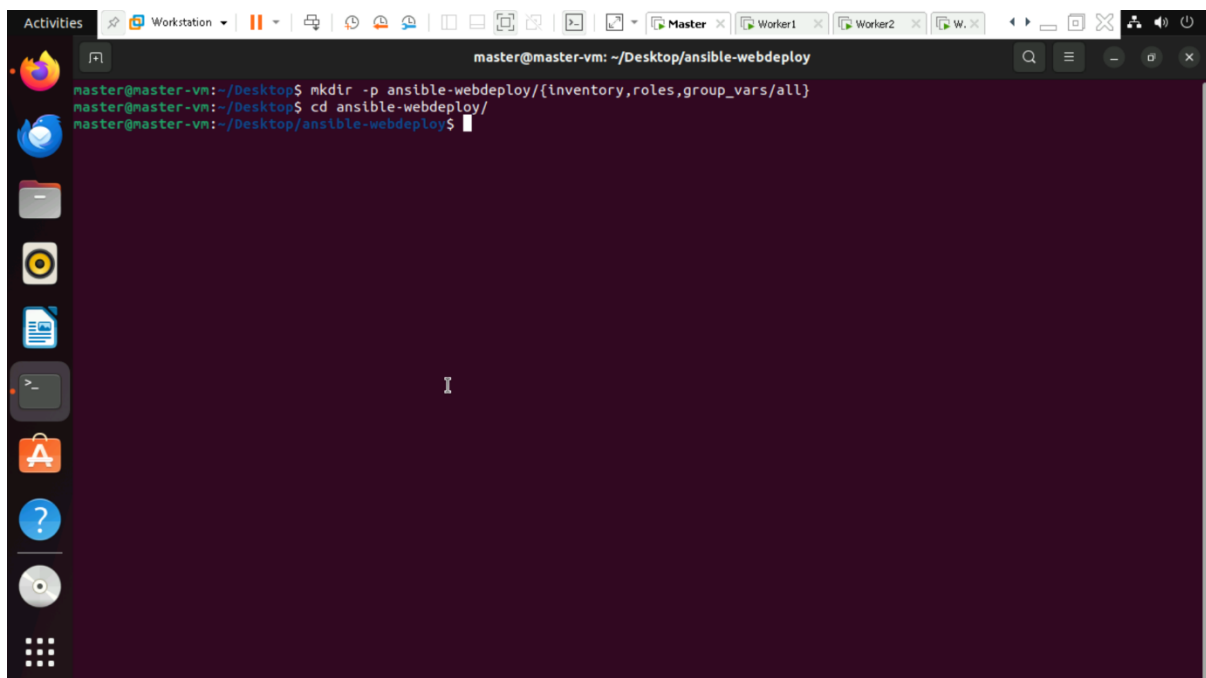
1. Check if all the worker nodes are active using the following command

Ansible all -m ping

A terminal window titled 'master@master-vm: ~/Desktop' showing the execution of 'ansible all -m ping'. The output shows three worker nodes (192.168.153.131, 192.168.153.133, and 192.168.153.132) all responding with 'SUCCESS' and 'ping: pong'. The terminal also shows the 'ansible\_facts' and 'discovered\_interpreter\_python' for each node.

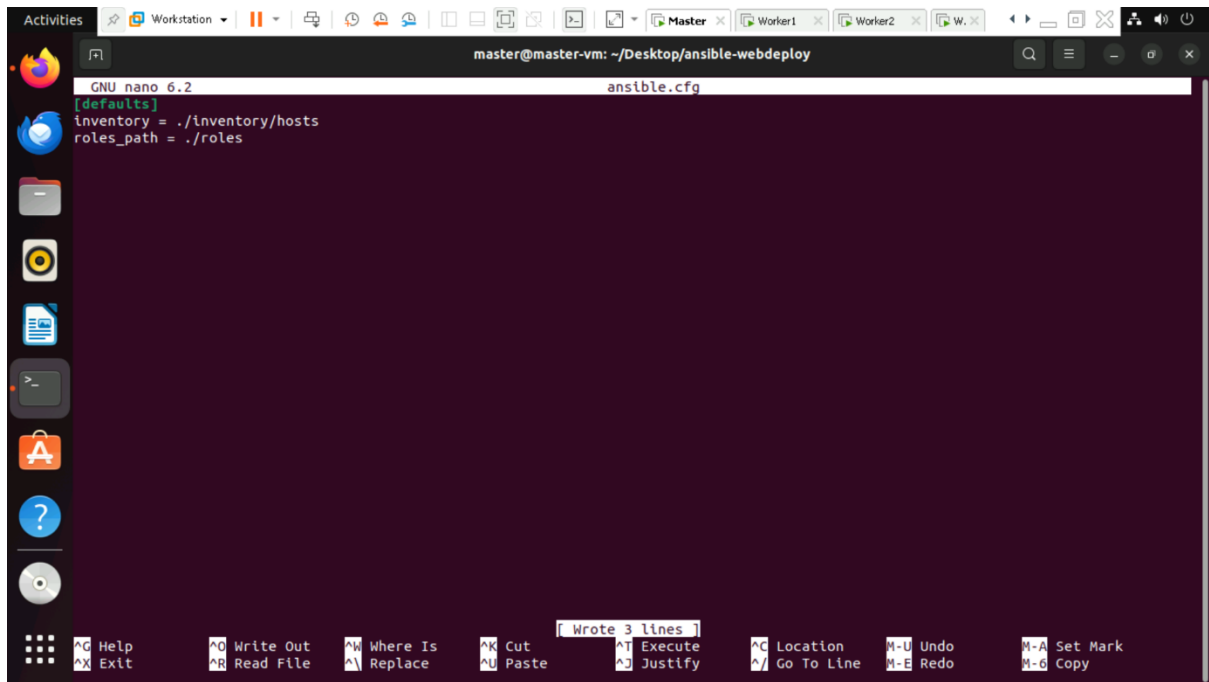
```
master@master-vm: ~/Desktop$ ansible all -m ping
192.168.153.131 | SUCCESS ==> {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
192.168.153.133 | SUCCESS ==> {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
192.168.153.132 | SUCCESS ==> {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
master@master-vm: ~/Desktop$
```

2. Create a directory ansible-webdeploy with inventory,roles,groups\_vars subdirectories

A terminal window titled 'master@master-vm: ~/Desktop/ansible-webdeploy' showing the creation of the 'ansible-webdeploy' directory and its subdirectories: 'inventory', 'roles', and 'group\_vars'. The terminal also shows the current directory being changed to 'ansible-webdeploy'.

```
master@master-vm: ~/Desktop$ mkdir -p ansible-webdeploy/{inventory,roles,group_vars/all}
master@master-vm: ~/Desktop$ cd ansible-webdeploy/
master@master-vm: ~/Desktop/ansible-webdeploy$
```

3. Create ansible.cfg file

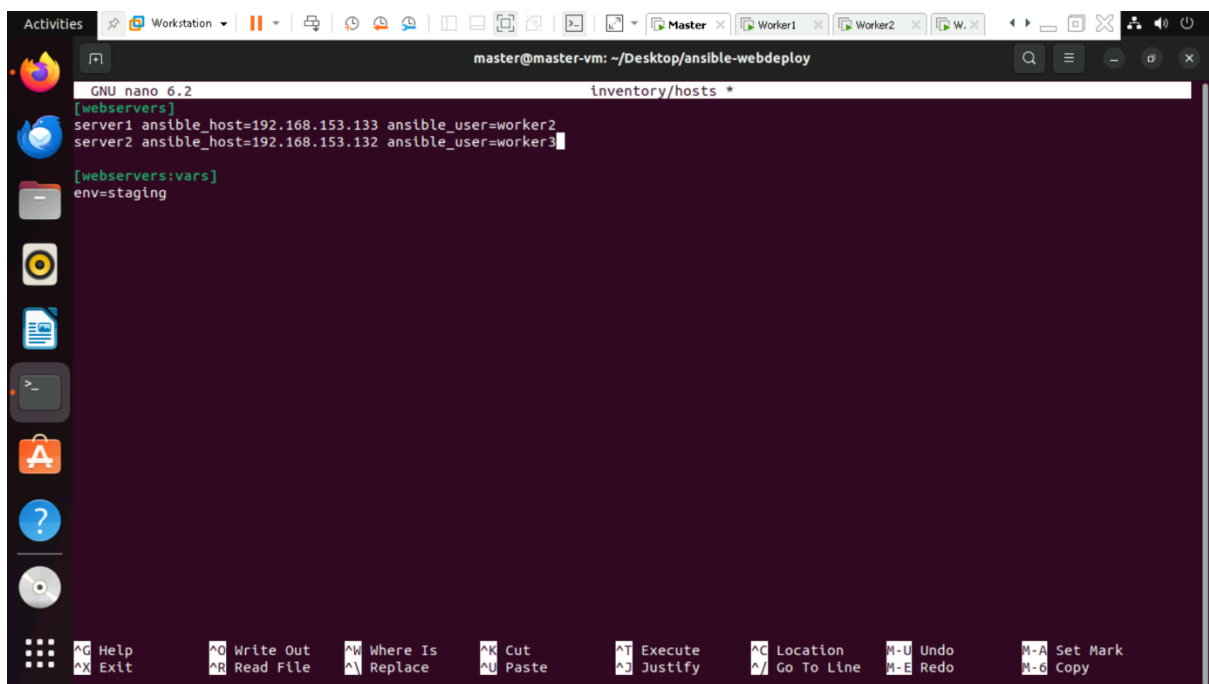


```
GNU nano 6.2 ansible.cfg
[defaults]
inventory = ./inventory/hosts
roles_path = ./roles
```

Wrote 3 lines

Help Exit Write Out Read File Where Is Replace Cut Paste Execute Justify Location Go To Line Undo Redo Set Mark Copy

4. Create inventory/hosts file and specify the webservers



```
GNU nano 6.2 inventory/hosts *
[webserver]
server1 ansible_host=192.168.153.133 ansible_user=worker2
server2 ansible_host=192.168.153.132 ansible_user=worker3

[webserver:vars]
env=staging
```

Help Exit Write Out Read File Where Is Replace Cut Paste Execute Justify Location Go To Line Undo Redo Set Mark Copy

5. Create a role webserver using the following command

Ansible-galaxy init roles/webserver

```
master@master-vm: ~/Desktop/ansible-webdeploy
master@master-vm:~/Desktop/ansible-webdeploy$ ansible-galaxy init roles/webserver
- Role roles/webserver was created successfully
master@master-vm:~/Desktop/ansible-webdeploy$
```

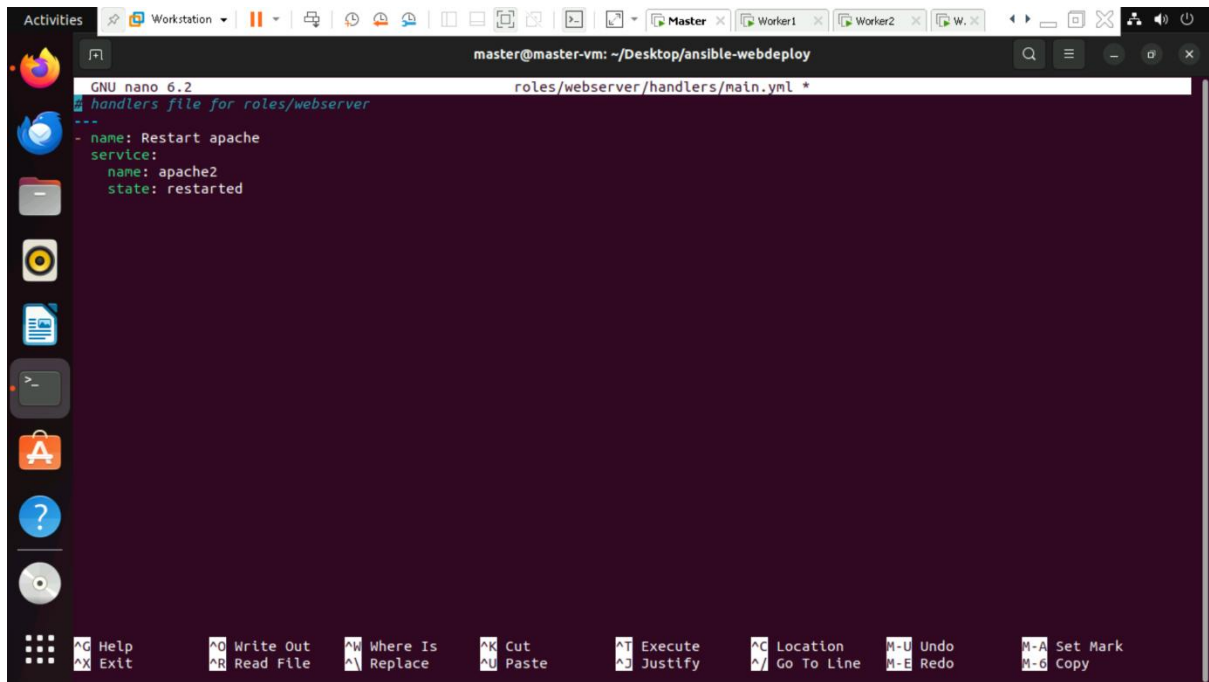
6. Create a .yaml file for the tasks

```
GNU nano 6.2 roles/webserver/tasks/main.yml
tasks file for roles/webserver
---
- name: Install Apache
  apt:
    name: apache2
    state: present
    update_cache: yes
    tags: apache

- name: Copy custom homepage
  template:
    src: index.html.j2
    dest: /var/www/html/index.html
  when: env == "staging"
  notify: Restart apache
  tags: apache

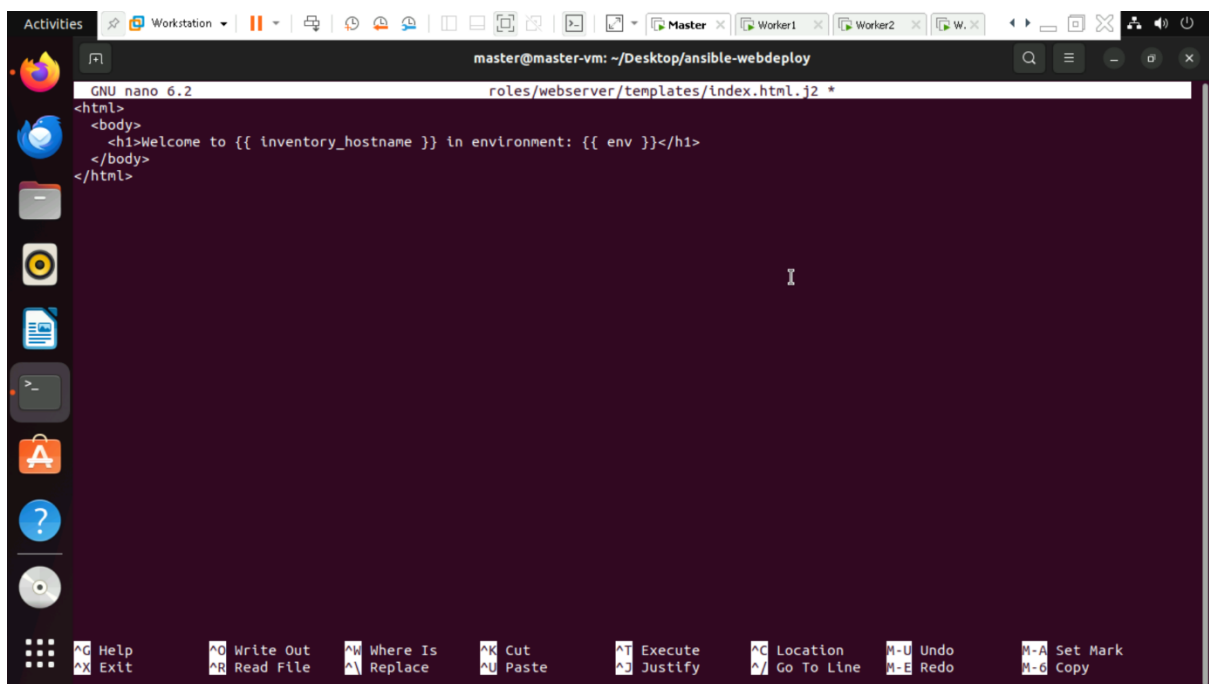
- name: Start and enable Apache
  service:
    name: apache2
    state: started
    enabled: yes
    tags: apache
```

7. Create a .yaml file for the handler



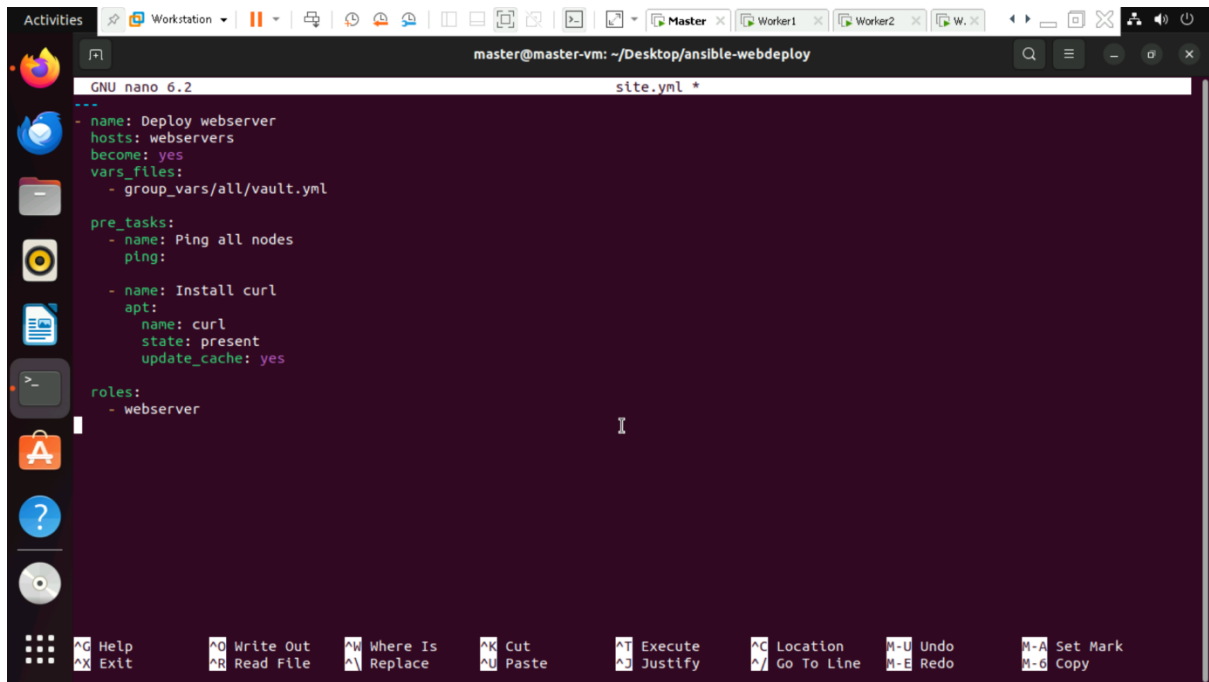
```
GNU nano 6.2 roles/webserver/handlers/main.yml *
handlers file for roles/webserver
---
- name: Restart apache
  service:
    name: apache2
    state: restarted
```

8. Create a simple Jinja2 template html file



```
GNU nano 6.2 roles/webserver/templates/index.html.j2 *
<html>
<body>
  <h1>Welcome to {{ inventory_hostname }} in environment: {{ env }}</h1>
</body>
</html>
```

9. Create the main site.yml file



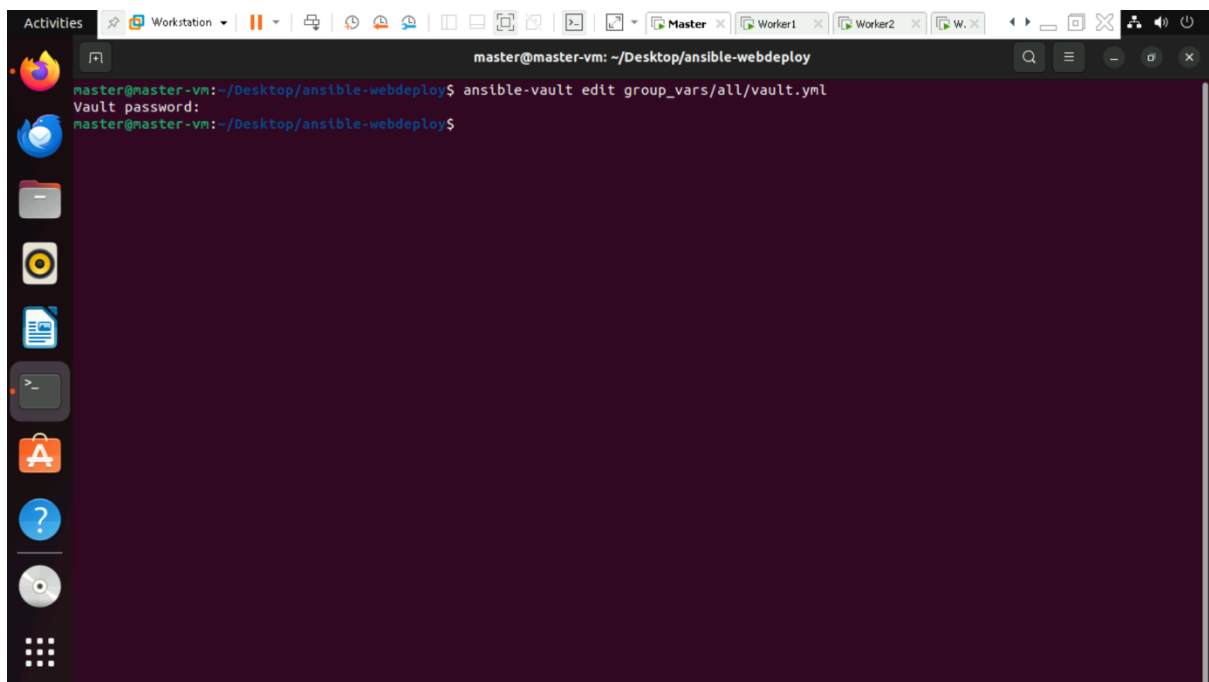
The screenshot shows a terminal window with the nano 6.2 editor open. The file being edited is site.yml. The content of the file is as follows:

```
---  
- name: Deploy webserver  
  hosts: webserver  
  become: yes  
  vars_files:  
    - group_vars/all/vault.yml  
  
pre_tasks:  
  - name: Ping all nodes  
    ping:  
  
  - name: Install curl  
    apt:  
      name: curl  
      state: present  
      update_cache: yes  
  
roles:  
  - webserver
```

The terminal window title is "master@master-vm: ~/Desktop/ansible-webdeploy". The bottom of the window shows a menu bar with various keyboard shortcuts like Help, Exit, Write Out, Read File, etc.

10. Setup the vault password and secret message using the following command

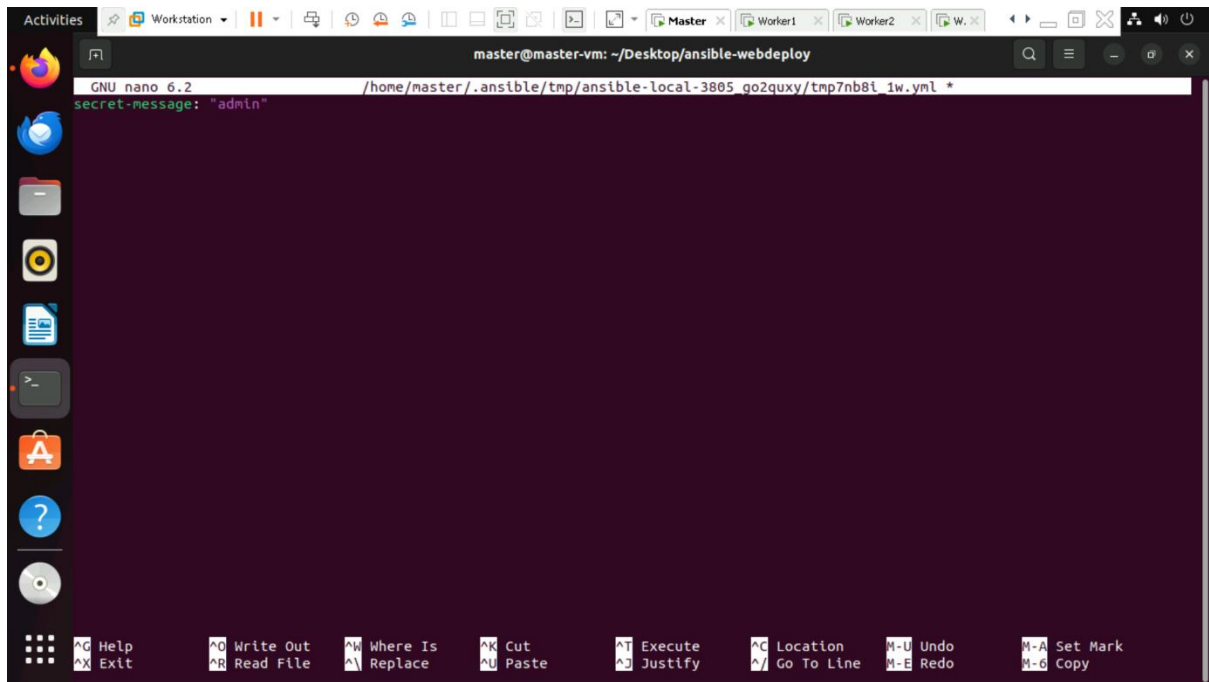
Ansible-vault create group\_vars/all/vault.yml



The screenshot shows a terminal window with the command prompt. The user has entered the command to create an Ansible vault file:

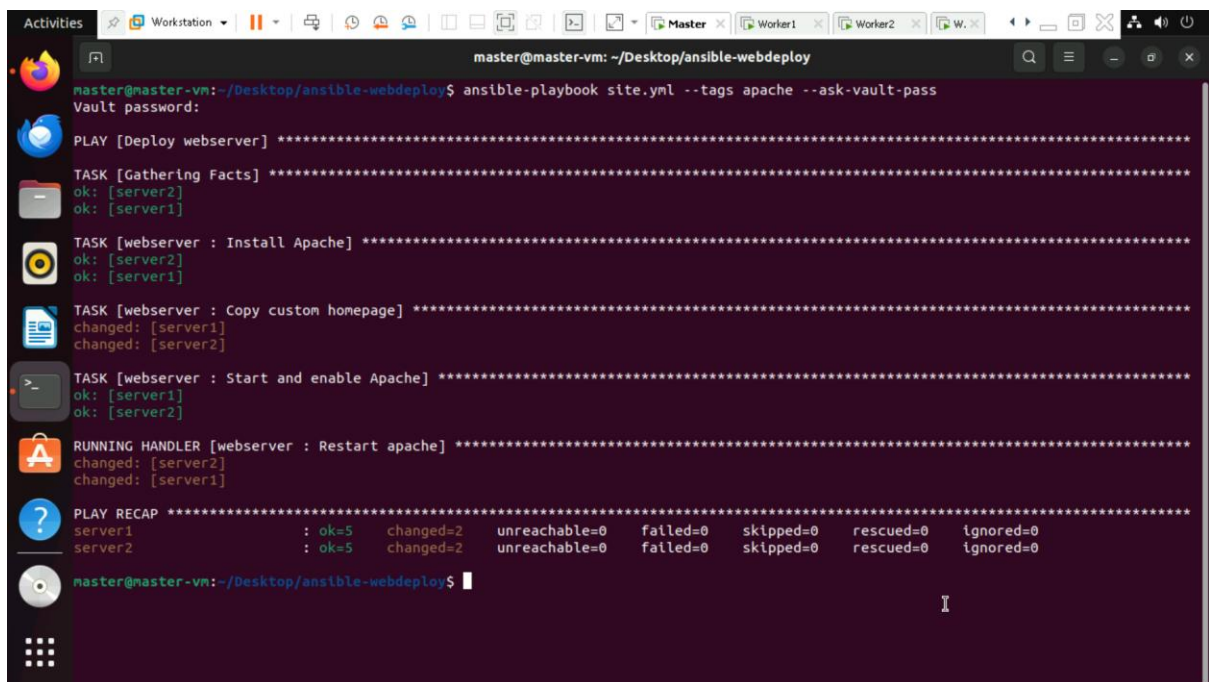
```
master@master-vm:~/Desktop/ansible-webdeploy$ ansible-vault edit group_vars/all/vault.yml  
Vault password:
```

The terminal window title is "master@master-vm: ~/Desktop/ansible-webdeploy". The prompt is "master@master-vm\$".



11. Run the Ansible playbook using the following command

Ansible-playbook site.yml --tags apache --ask-vault-pass



12. The output can be accessed on the worker ips, i.e, 192.168.153.133 and 192.168.153.132

