⦿ Create your first role with name (web)

⦿ The task book will include:

1. installing a package

(get the package name from vars)

2. Copying a file from controller to host using template

(get the template name & template message from vars)

(the actual template file will be stored in ./roles/web/templates)

(will also notify the restart handler)

3. copying a list of files from controller to host using loop

(get the list of file names from vars)

(the actual files will be stored in ./roles/web/files)

(will be executed using Handlers)

⦿ Restart the service of the installed package

(will be executed using Handlers chaining)

```
root@ip-10-2-0-220:~/lab1/roles# tree
.
├── ansible.cfg
├── inventory
├── role.yaml
└── web
    ├── files
    │   ├── index.html
    │   ├── script.js
    │   └── styles.css
    ├── handlers
    │   └── main.yaml
    ├── tasks
    │   └── main.yaml
    ├── templete
    │   └── index.html.j2
    └── vars
        └── main.yaml

6 directories, 10 files
root@ip-10-2-0-220:~/lab1/roles#
```

```
root@ip-10-2-0-220:~/lab1/roles# ansible-playbook role.yaml
BECOME password:

PLAY [Install server and configure it] *********************************************************************

TASK [Gathering Facts] *************************************************************************************
ok: [10.2.0.67]

TASK [role : Installing webserver] *************************************************************************
changed: [10.2.0.67]

PLAY RECAP *****************************************************************************************************
10.2.0.67                  : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

root@ip-10-2-0-220:~/lab1/roles#
```

```
root@ip-10-2-0-220:~/lab1/roles# curl 10.2.0.67
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Simple Website</title>
    <link rel="stylesheet" type="text/css" href="styles.css">
</head>
<body>
    <header>
        <h1>Simple Website</h1>
    </header>
    <div class="container">
        <h2>Welcome to my website!</h2>
        <p>This is a simple website with HTML, CSS, and JavaScript.</p>
        <button id="colorChangeButton">Change Background Color</button>
    </div>
    <script src="script.js"></script>
</body>
</html>
```

```
- name: "copy static Files"
  ansible.builtin.copy:
    src: "{{ item }}"
    dest: "/var/www/html/{{ item }}"
    mode: "644"
  loop: "{{ website_files }}"
  listen: "Send_website"
  notify: Service Restart

- name: Service Restart
  ansible.builtin.service:
    name: "{{ service_name }}"
    state: restarted
~
~
```

```
- name: Installing webserver
  ansible.builtin.apt:
    name: "{{ package_name }}"
    update_cache: true
    state: present
  register: status
  changed_when: not status.failed
  when: ansible_facts.os_family == "Debian"
~
~
~
```

```yaml
package_name: "nginx"
service_name: "nginx"
student:
  first_name: "Osama"
  last_name: "Gamal"
  bio: "Junior Devops Engineer"


website_files:
- index.html
- styles.css
- script.js
```

```yaml
- name: Install server and configure it
  hosts: servers
  roles:
    - web
~
~
~
~
```