**Tasks: 1. Develop a simple HTTP server with GET endpoint “ping-pong”.**

**[maltesh@Ansible ~]$ python -V**

Python 3.6.4

**[maltesh@Ansible ~]$ cat server.py**

import http.server

import socketserver

PORT = 8080

Handler = http.server.SimpleHTTPRequestHandler

with socketserver.TCPServer(("", PORT), Handler) as httpd:

print("serving at port", PORT)

httpd.serve\_forever()

**[maltesh@Ansible ~]$ cat index.html**

<html>

<head>

<title>Python Code</title>

</head>

<body>

<h1>Afternerd</h1>

<p>Ping Pong</p>

</body>

</html>

**[maltesh@Ansible ~]$ python server.py 🡨 Executing Python Script**

serving at port 8080

Open the firefox and type the URL “localhost:8080”. Will get the output like this.



**TASK 2. Using configuration management tools, you have to develop automation scripts for resource provisioning and deployment of your HTTP server to AWS Cloud.**

|  |
| --- |
| **ANSIBLE code as YML file -- create\_ec2.yml** |
| ---  - hosts: ALL     tasks:     - name: To spin up ec2 instance       ec2:         aws\_access\_key: '{{ aws\_access\_key }}'         aws\_secret\_key: '{{ aws\_secret\_key }}'         region: '{{ region }}'         key\_name: '{{key\_name}}'         instance\_type: '{{instance\_type}}'         image: '{{image}}'         wait: yes         group: '{{group}}'         instance\_tags:              Name: rhel6         count: '{{count}}'         vpc\_subnet\_id: '{{vpc\_subnet\_id}}'         assign\_public\_ip: yes       register: ec2     - name: Add new instance to host group       add\_host:         hostname: "{{ item.public\_ip }}"         groupname: Testing         ansible\_user: ec2-user         ansible\_ssh\_private\_key\_file: /root/LB.pem       with\_items: "{{ ec2.instances }}"     - name: Wait for SSH to come up       wait\_for:          host: "{{ item.public\_dns\_name }}"          port: 22          delay: 60          timeout: 320          state: started       with\_items: "{{ ec2.instances }}"  - name: Configure instance(s)     hosts: Testing     become: True     gather\_facts: True     tasks:     - name: Apache package installation       yum: pkg=httpd state=installed     - name: To start apache service       service: name=httpd state=started |
| **Variable File -- variable.txt** |
| aws\_access\_key: ABCDEFGHIJ  aws\_secret\_key: KLMNOPQRSTUVWXYZ  region: ap-south-1  key\_name: LB  instance\_type: t2.micro  image: ami-5b673c34  group: launch-wizard-4  count: 1  vpc\_subnet\_id: subnet-d4c58cbd |
| **Execution**  Create file for variable as group\_vars file & keep in same directory with  create\_ec2.yml  pass inventory in same directory & run command as below. Thanks!  ansible-playbook  -i variable.txt create\_ec2.yml |