**Steps:**

**Section 1**

Clone all the repos in one folder.

Find out private and public key to generate SSH on Provision Control Node EC2

Cmd : ls -al ~/.ssh

If not, generate private and public key

Copy the private key and public key path and update them in variables in Controlnode

Terraform init and Terraform apply.

Terraform will output SSH key copy it and keep it aside. Along side check if the ec2 created or not in AWS Console

**Sections 2**

Navidate to Provision Managed nodes folder and open it on VS

Update the SHH on the Id\_rsa.pub

On the Modules->Compute-> Main.tf , update the count to 4

Terraform init and apply – It will create 4 ec2 instances ..

Take a screenshot (at apply)

**Section 3**

Now , ssh from laptop to control node : It will connect

Ssh from laptop to one of the managed nodes : it will not connect

But try , connectecting from control node it will connect because they are connected with SSH key.

**Section 4**

Create hosts.ini file in the control node on the home directory (it is default don’t need to navigate)

Add 2 servers each unders einstein and Cloud

Save it and take screenshot of the final file .

**Sections 5:**

Run the following command   
ansible all -m shell -a "free -m" -i hosts.ini

It will give the python warning .. run the command “ sudo vi /etc/ansible/ansible.cfg

“ it will open the file add the “interpreter\_python = auto\_silent” under default section.

Run the following command again this time you won’t see the python error  
ansible all -m shell -a "free -m" -i hosts.ini

Verify the python error on the server groups (einstein, Cloud )

ansible einstein -m shell -a "free -m" -i hosts.ini

ansible Cloud -m shell -a "free -m" -i hosts.ini

**Take screenshot .**

**Section 6**

**Scp the ControlnodeFiles repo to control node home directory from laptop**

**Example**vinodkumar@6a:03:d5:80:1e:a0 CloudOps\_Module4\_Class6\_Repo4\_ControlNodeFiles % scp -r /Users/vinodkumar/Desktop/lab2/CloudOps\_Module4\_Class6\_Repo4\_ControlNodeFiles ec2-user@3.84.189.198:~/

Connect to control node from laptop and see if the files are copied or not .

Once copied .. change source path in the yaml file and run the below command

ansible-playbook -i /home/ec2-user/hosts.ini install\_einstein.yaml

and copy and paste webservers ip’s and see the output .

Next for Cloud Output.

change source path in the yaml file and run the below command

ansible-playbook -i /home/ec2-user/hosts.ini install\_Cloud.yaml