DevOps (CS457)

ASSIGNMENT 3 – Task 5

Add users to EC2 instances with SSH Access – Ansible

Submitted to:
Dr. Uma S

Submitted by:

Team 1
Sumith Sai Budde (18BCS101)

Syed Sufyan Ahmed (18BCS103)

Shaik Fharook (18BCS091)

Parvati Jayakumar (18BEC036)

P Chethan Krishna (18BEC040)

G Rithika (18BCS031)

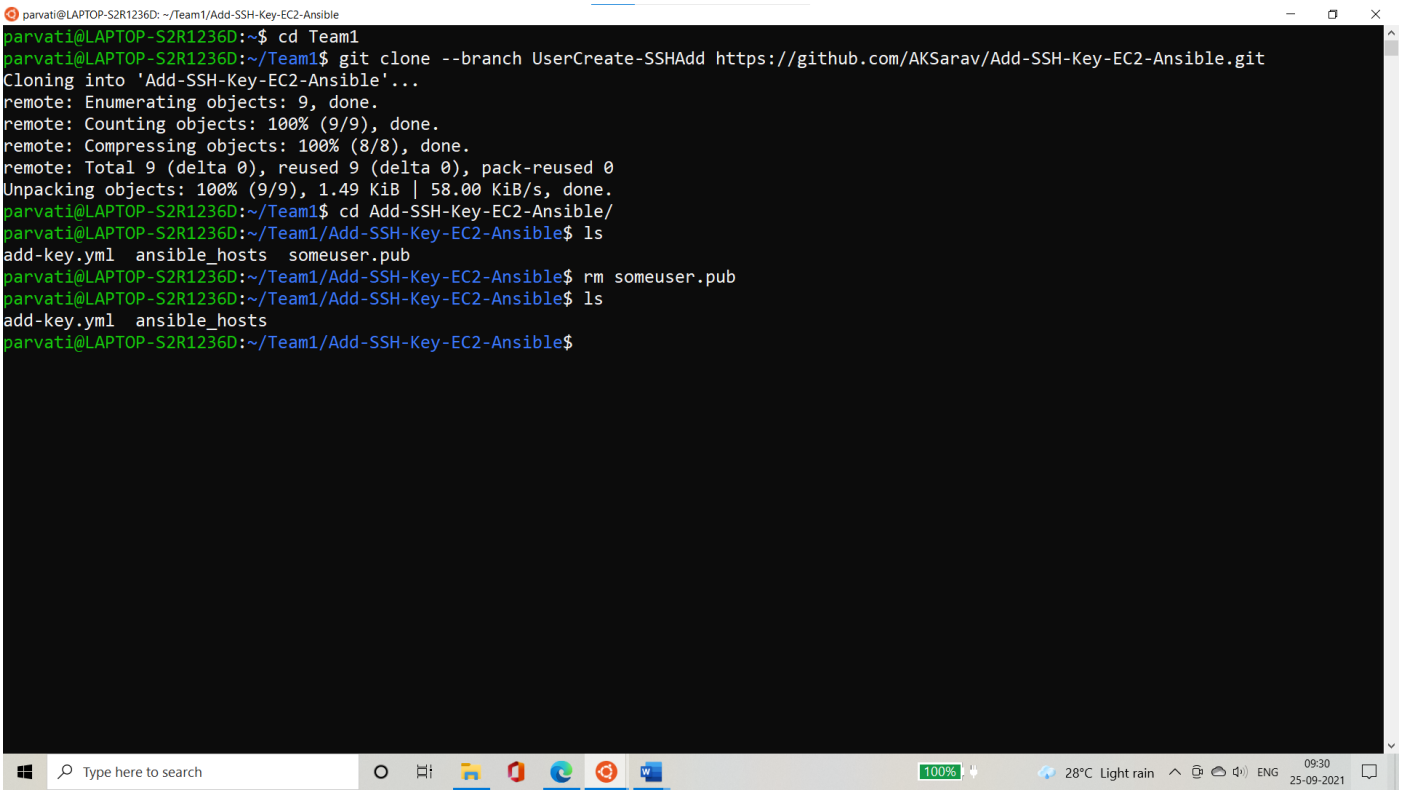
Pokala Dattatreya (18BCS067)

Rama Dundi Saketh (18BCS076)

STEP 1: Clone the GitHub repository and modify the files

Step 1.1: Clone the repository using the command:

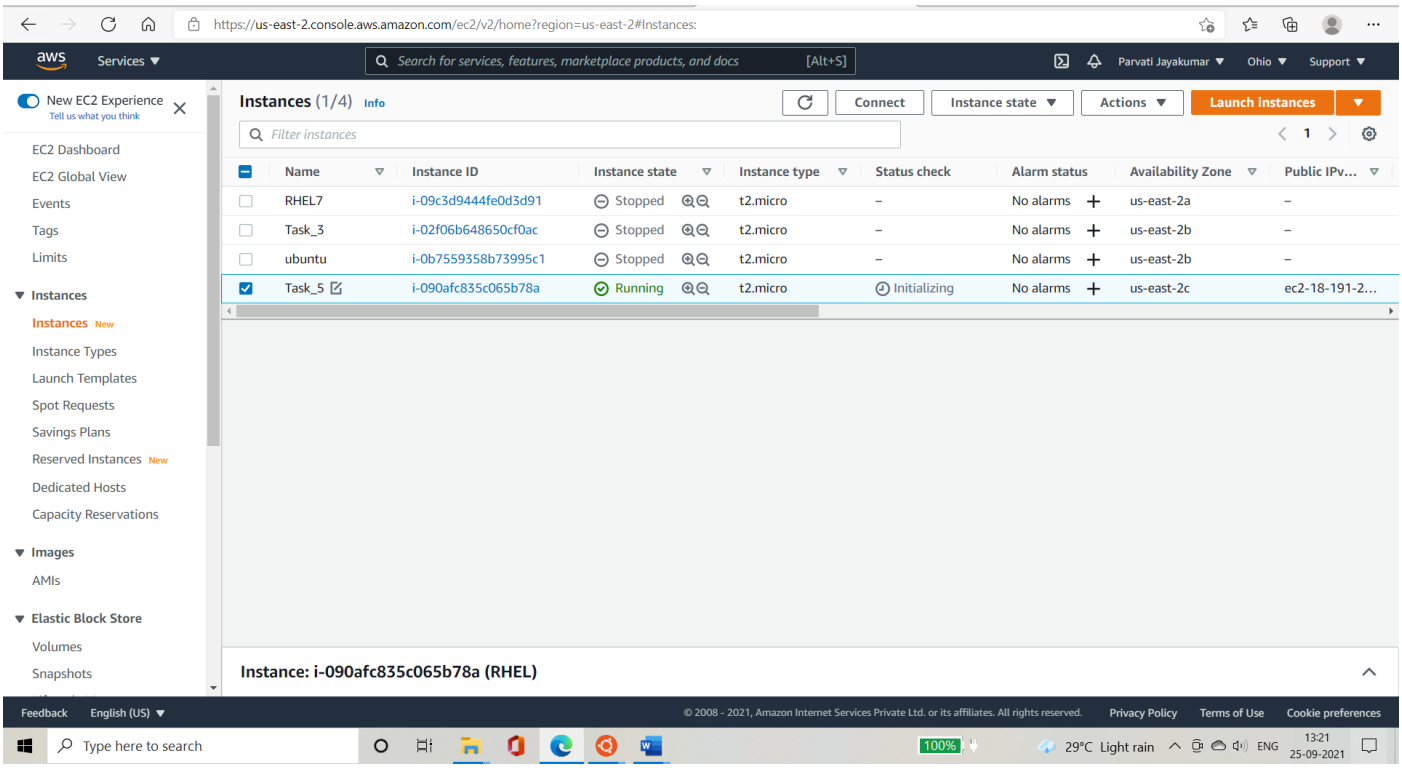
```
git clone --branch UserCreate-SSHAdd https://github.com/AKSarav/Add-SSH-Key-EC2-Ansible.git
```



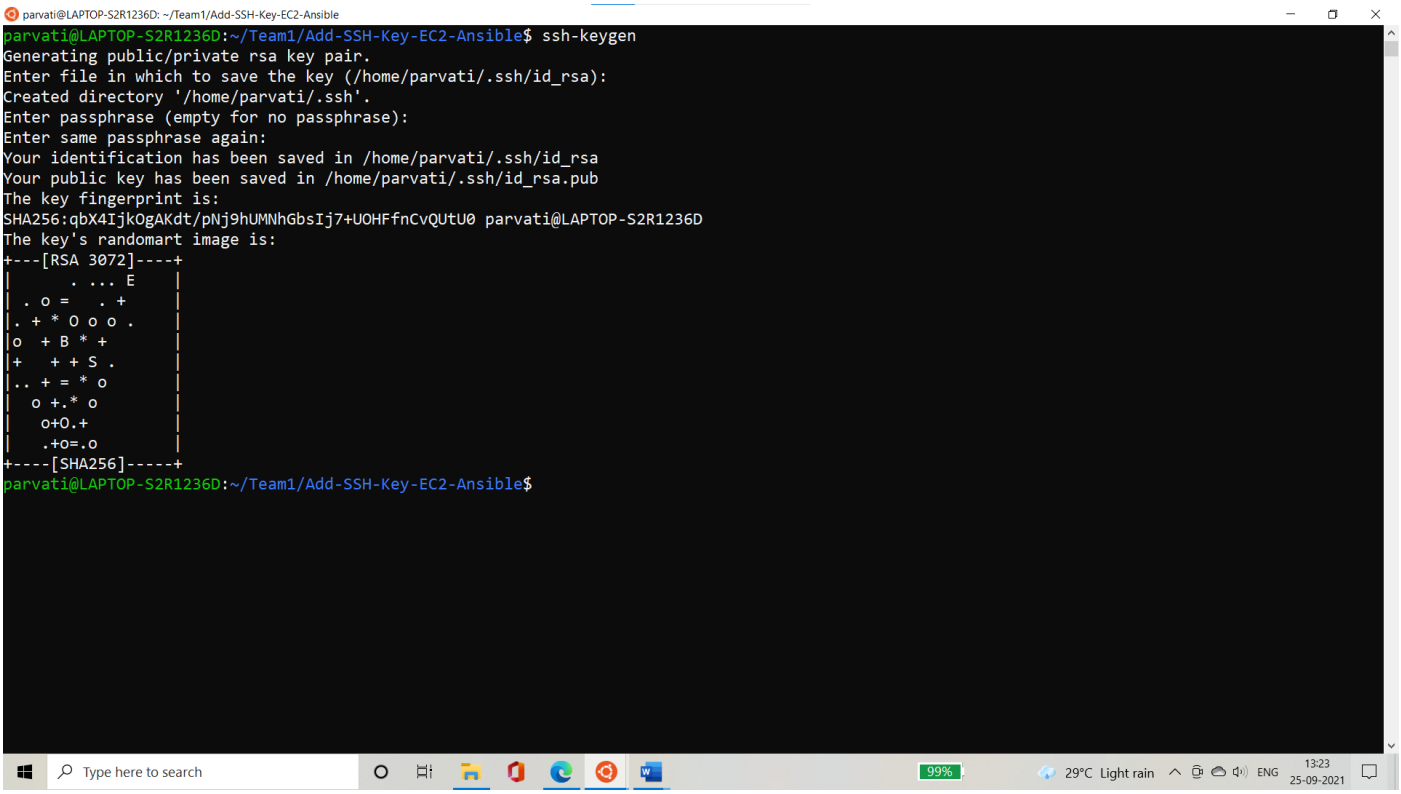
STEP 2: Set up the remote instance

Step 2.1: Launch a Red Hat Enterprise Linux served (Example: as server named ‘Task_5’).

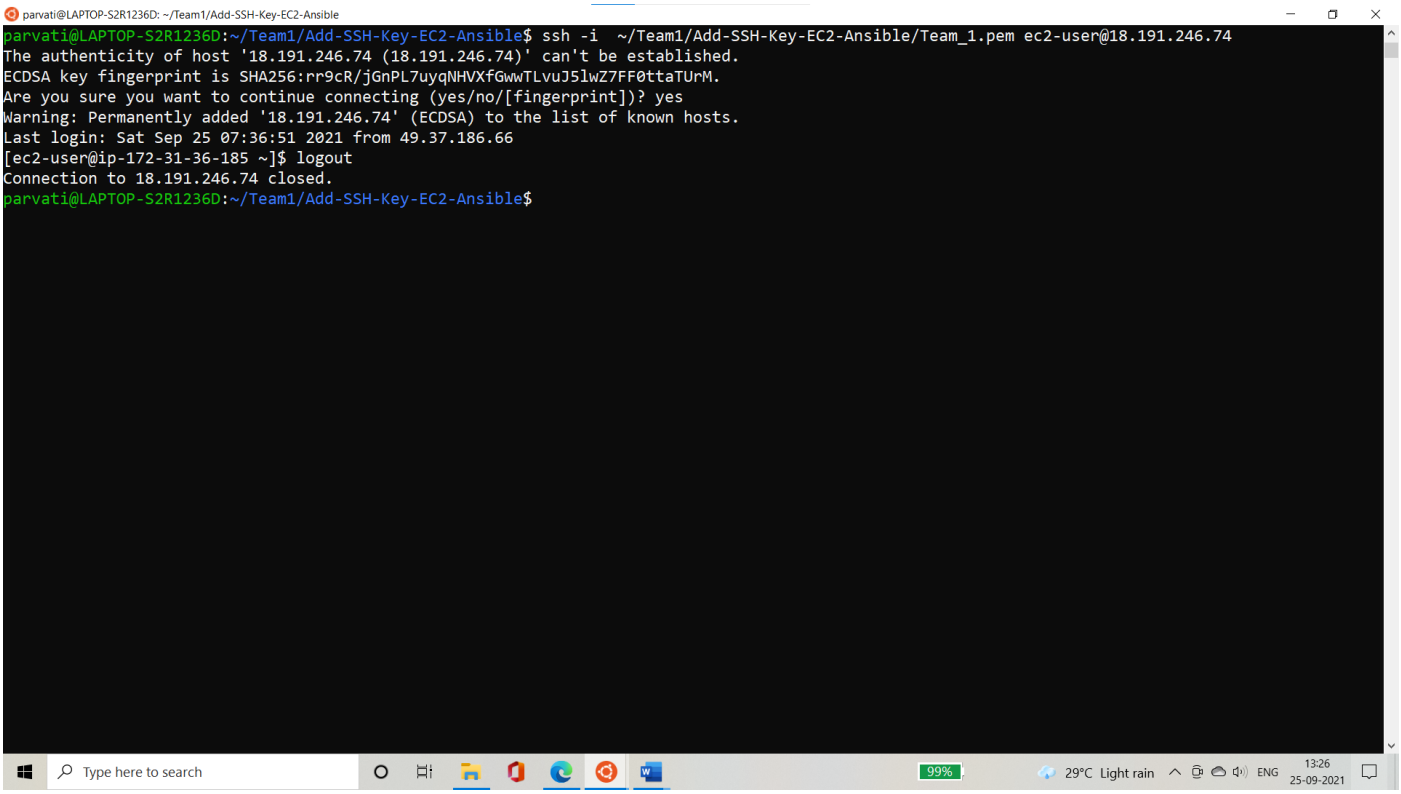
Make sure that port -22 is open.



Step 2.2: Generate a SSH key.

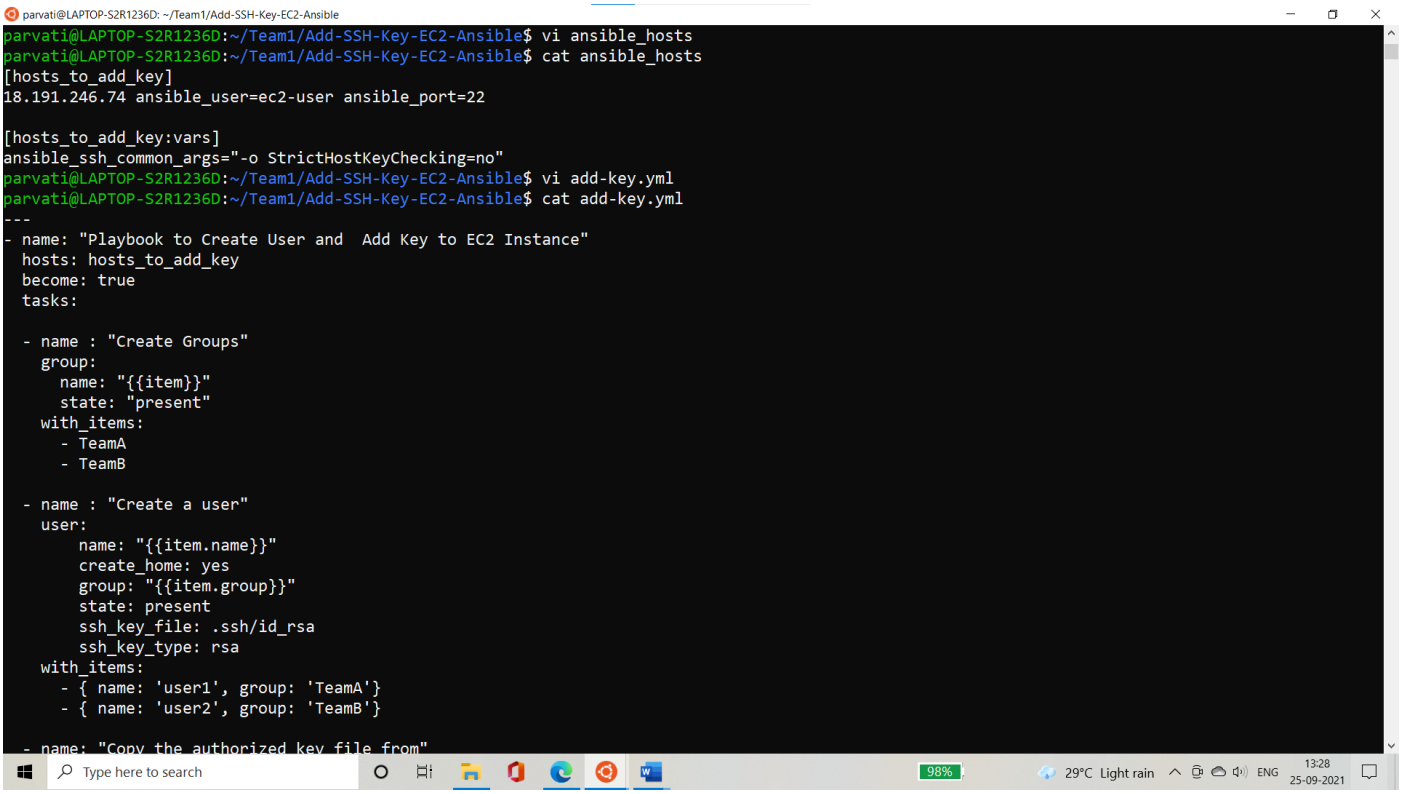


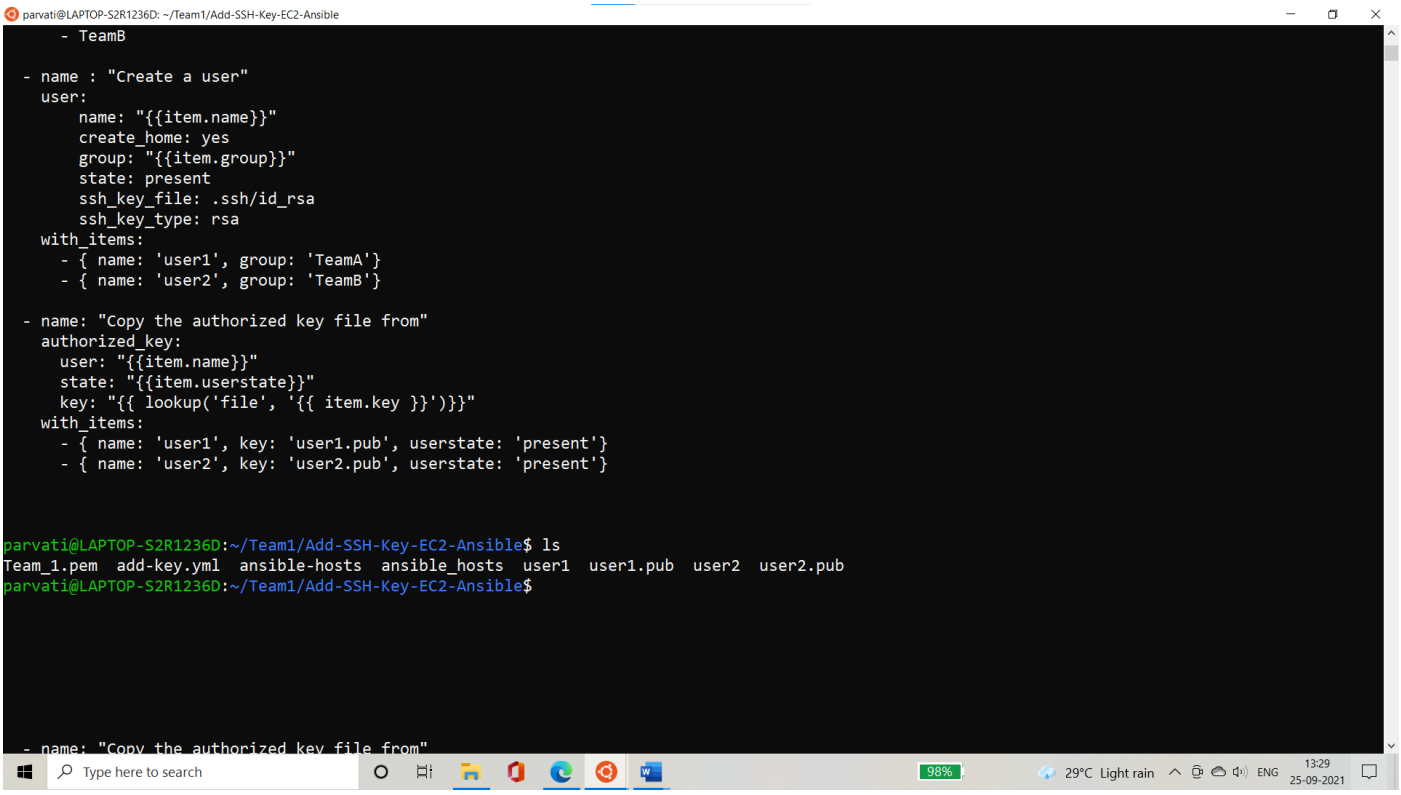
Step 2.3: Make sure that the remote server ‘Task_5’ can be accessed through our local machine.



STEP 3: Modify the files required for executing the playbook

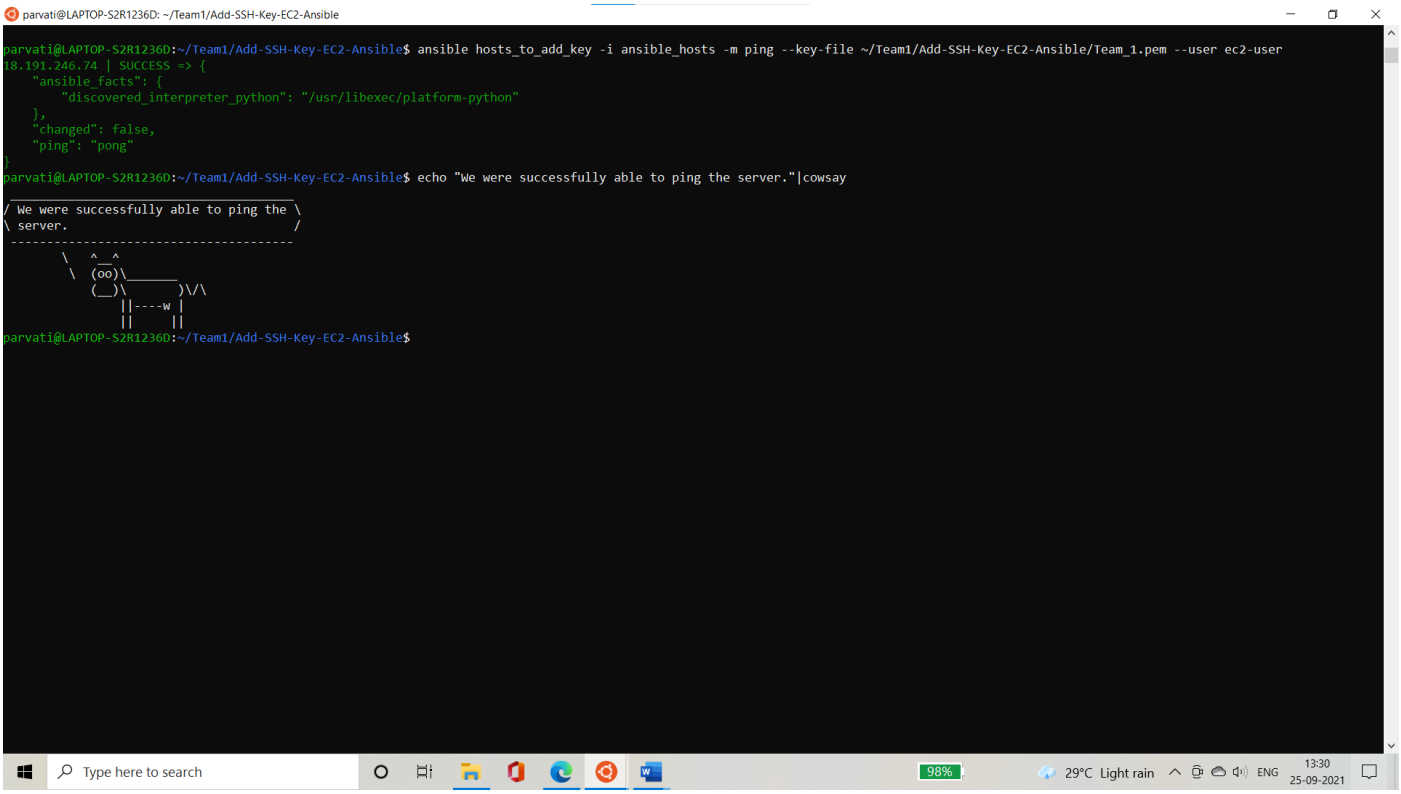
Step 3.1: Configure the files: ansible_hosts, add-key.yml.



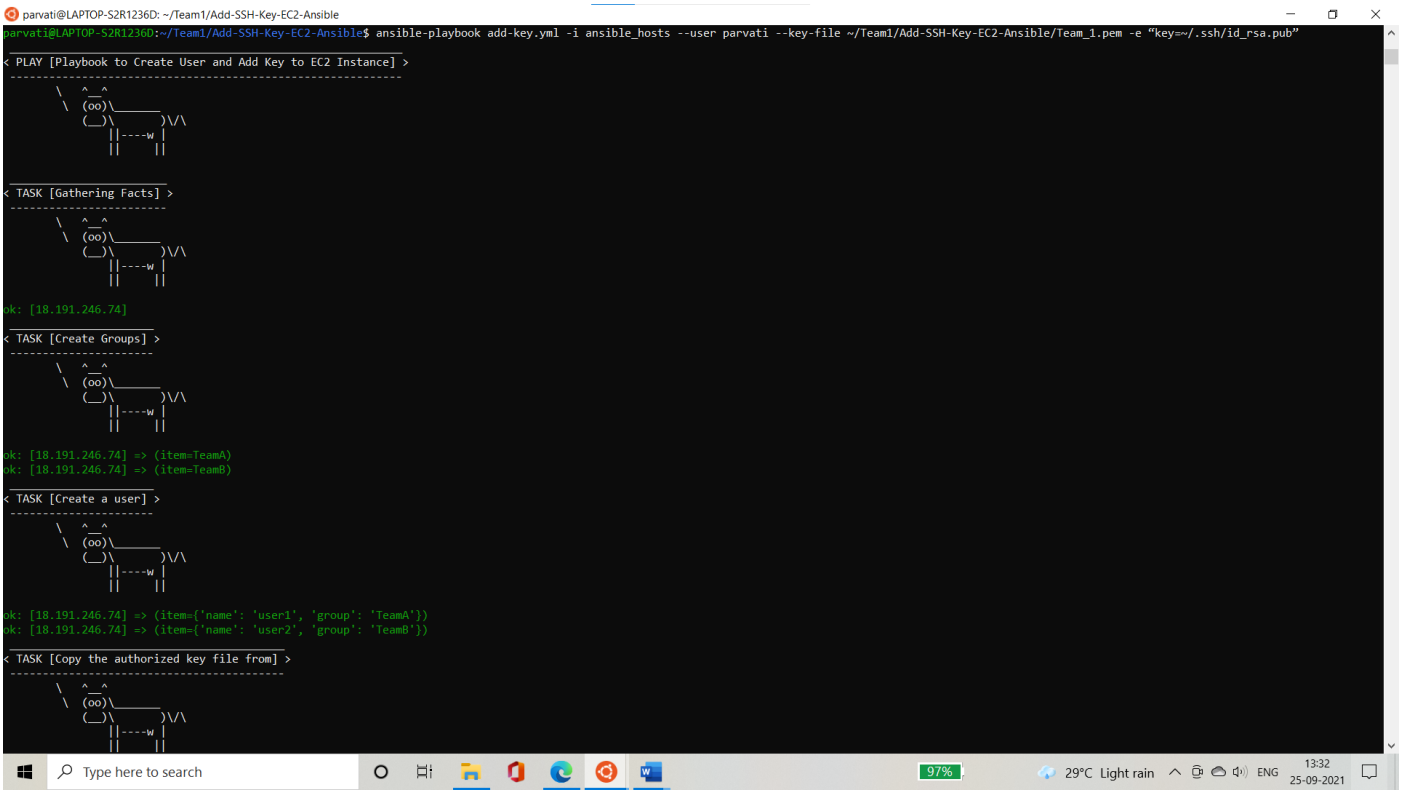


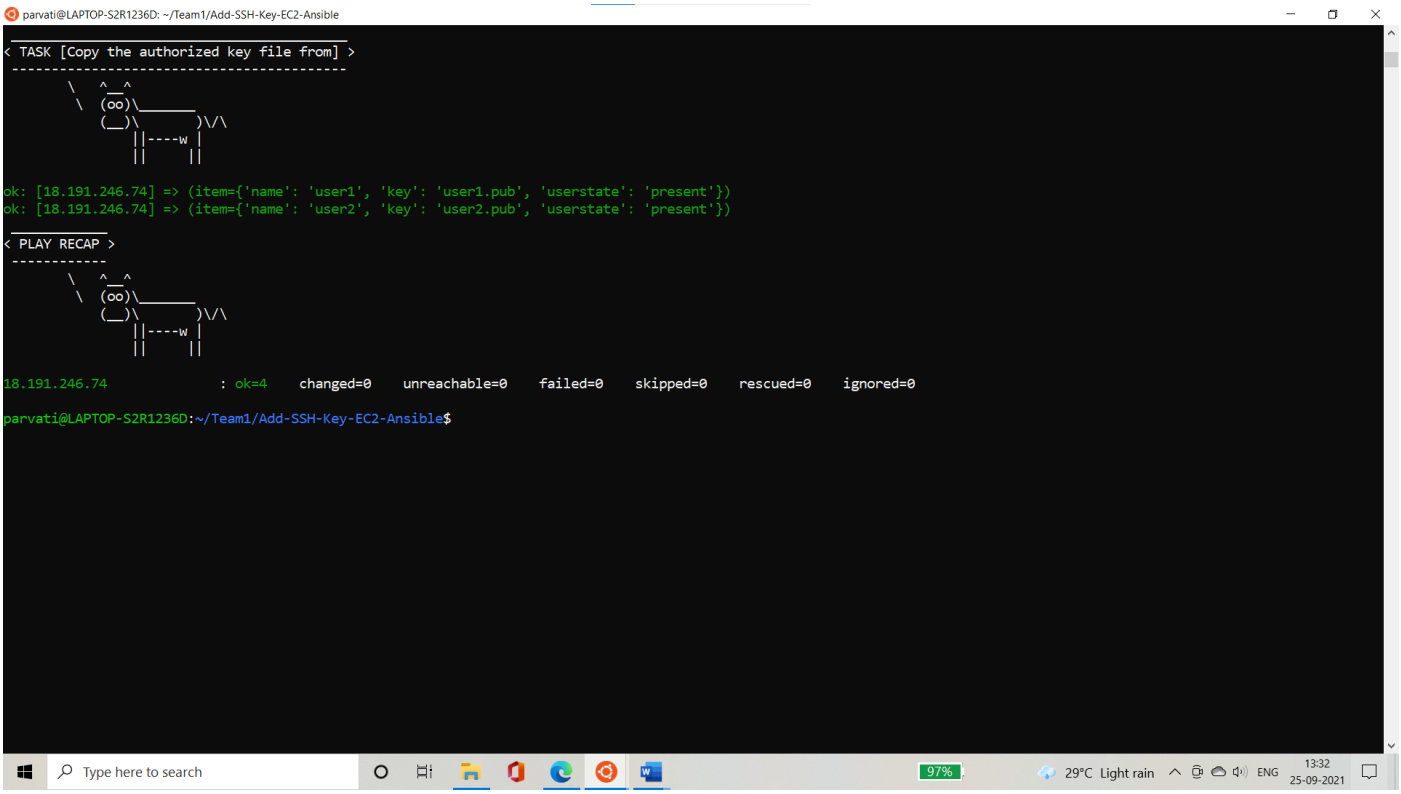
STEP 4: Execute the playbook

Step 4.1: Ping to check if the connection is successful

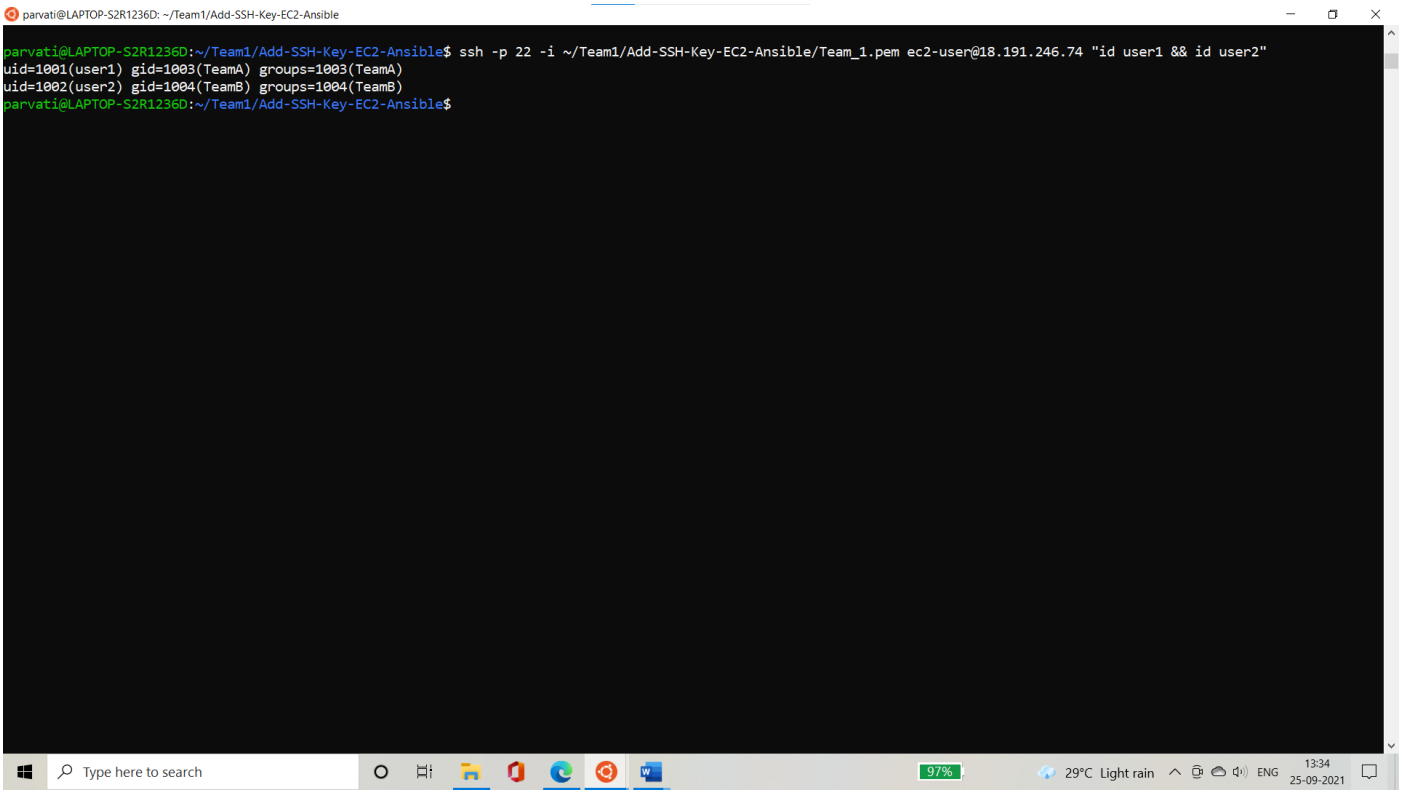


Step 4.2: Use the command ansible-playbook to execute add-key.yml



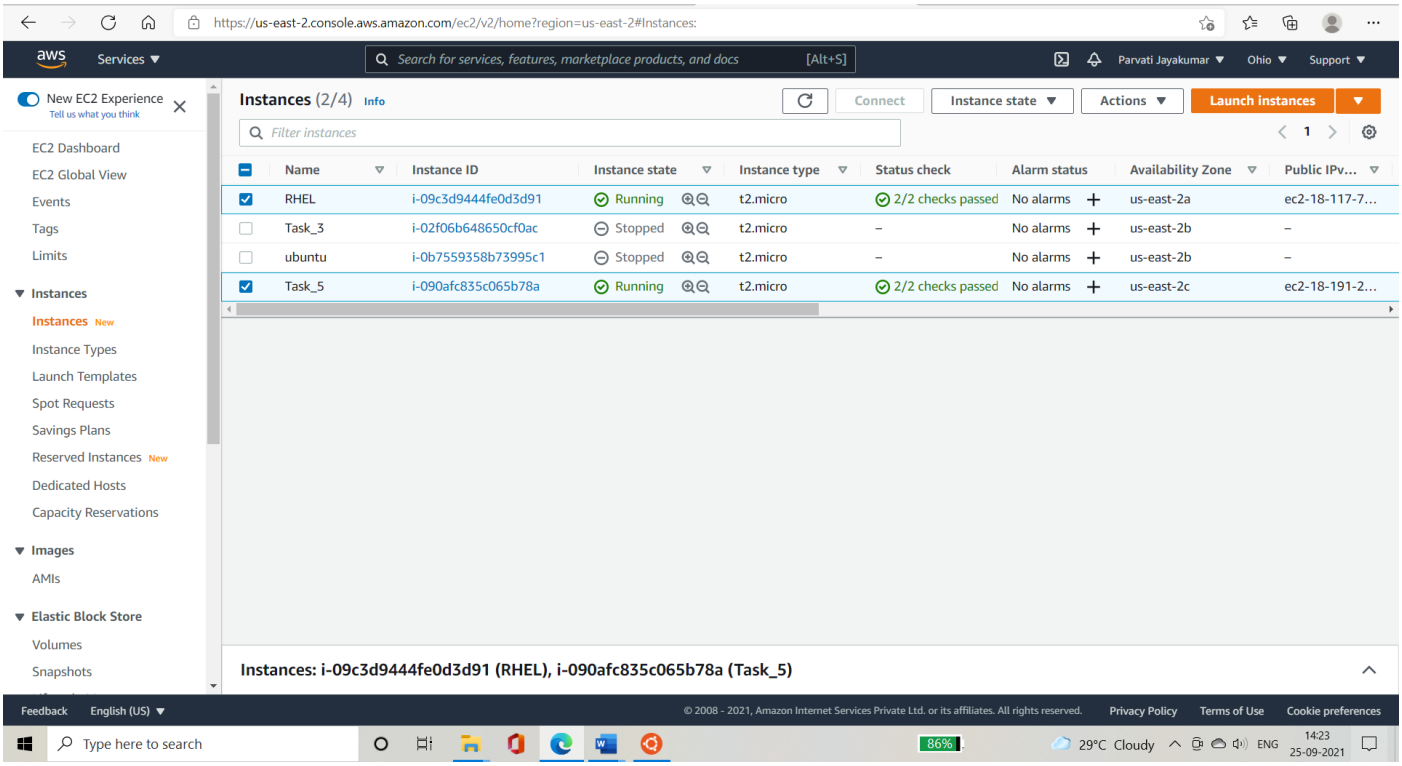


Step 4.3: Validate the results

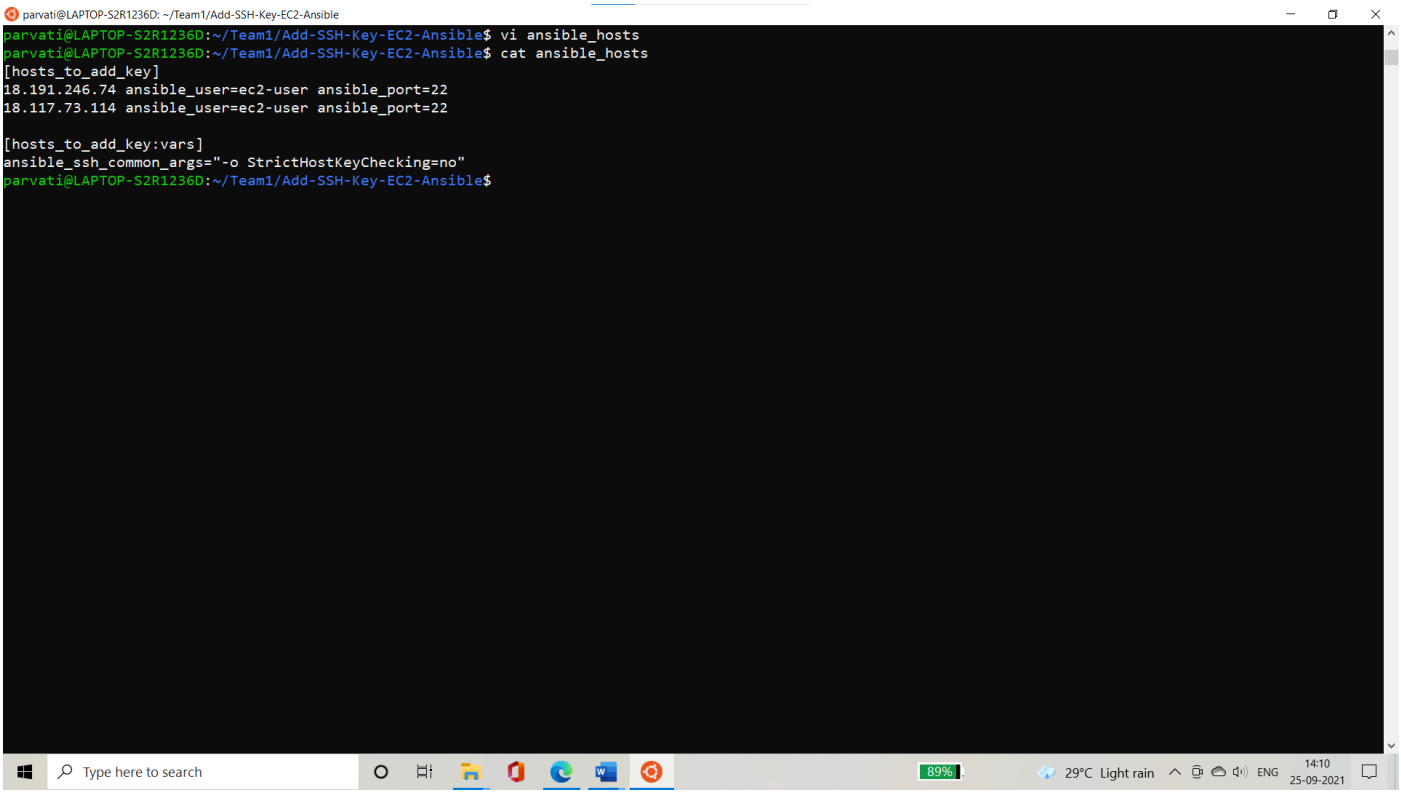


STEP 5: You can also try to add users at once by giving multiple hosts.

Step 5.1: Launch a new instance (Example: RHEL)



Step 5.2: Configure ansible_hosts file



Step 5.3: Execute the YAML file

```
parvati@LAPTOP-S2R1236D: ~/Team1/Add-SSH-Key-EC2-Ansible
parvati@LAPTOP-S2R1236D:~/Team1/Add-SSH-Key-EC2-Ansible$ ansible hosts_to_add_key -i ansible_hosts -m ping --key-file ~/Team1/Add-SSH-Key-EC2-Ansible/Team_1.pem --user ec2-user
18.191.246.74 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/libexec/platform-python"
    },
    "changed": false,
    "ping": "pong"
}
18.117.73.114 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/libexec/platform-python"
    },
    "changed": false,
    "ping": "pong"
}
parvati@LAPTOP-S2R1236D:~/Team1/Add-SSH-Key-EC2-Ansible$ ansible-playbook add-key.yml -i ansible_hosts --user parvati --key-file ~/Team1/Add-SSH-Key-EC2-Ansible/Team_1.pem -e "key=~/.ssh/id_rsa.pub"

 _____________________________________________________________
< PLAY [Playbook to Create User and Add Key to EC2 Instance] >
 -------------------------------------------------------------
       \   ^__^
        \  (oo)\_______
           (__)\       )\/\
               ||----w |
               ||     ||

 ______________________
< TASK [Gathering Facts] >
 ----------------------
       \   ^__^
        \  (oo)\_______
           (__)\       )\/\
               ||----w |
               ||     ||

ok: [18.117.73.114]
ok: [18.191.246.74]

 ____________________
< TASK [Create Groups] >
 --------------------
       \   ^__^
        \  (oo)\_______
           (__)\       )\/\
               ||----w |
               ||     ||

changed: [18.117.73.114] => (item=TeamA)
ok: [18.191.246.74] => (item=TeamA)
changed: [18.117.73.114] => (item=TeamB)
ok: [18.191.246.74] => (item=TeamB)
```



```
parvati@LAPTOP-S2R1236D: ~/Team1/Add-SSH-Key-EC2-Ansible
               ||     ||

changed: [18.117.73.114] => (item=TeamA)
ok: [18.191.246.74] => (item=TeamA)
changed: [18.117.73.114] => (item=TeamB)
ok: [18.191.246.74] => (item=TeamB)

 ____________________
< TASK [Create a user] >
 --------------------
       \   ^__^
        \  (oo)\_______
           (__)\       )\/\
               ||----w |
               ||     ||

ok: [18.191.246.74] => (item={'name': 'user1', 'group': 'TeamA'})
changed: [18.117.73.114] => (item={'name': 'user1', 'group': 'TeamA'})
changed: [18.117.73.114] => (item={'name': 'user2', 'group': 'TeamB'})
ok: [18.191.246.74] => (item={'name': 'user2', 'group': 'TeamB'})

 ________________________________________
< TASK [Copy the authorized key file from] >
 ----------------------------------------
       \   ^__^
        \  (oo)\_______
           (__)\       )\/\
               ||----w |
               ||     ||

ok: [18.191.246.74] => (item={'name': 'user1', 'key': 'user1.pub', 'userstate': 'present'})
changed: [18.117.73.114] => (item={'name': 'user1', 'key': 'user1.pub', 'userstate': 'present'})
ok: [18.191.246.74] => (item={'name': 'user2', 'key': 'user2.pub', 'userstate': 'present'})
changed: [18.117.73.114] => (item={'name': 'user2', 'key': 'user2.pub', 'userstate': 'present'})

 ____________
< PLAY RECAP >
 ------------
       \   ^__^
        \  (oo)\_______
           (__)\       )\/\
               ||----w |
               ||     ||

18.117.73.114              : ok=4    changed=3    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
18.191.246.74              : ok=4    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```

Step 5.4: Validate the results by checking users in both the instances