Report

Problem Statement :

Create an automation to enable SSH based remote access on 5 different Ubuntu 18.04 servers for a user. Once the automation is run, it should expect username as a command line argument and enable the access for that username. Make necessary assumptions on your own to complete the assignment so that we can discuss your implementation during the technical interview. Please host the solution on a public GIT repo and share the URL to the GIT repo with us.

Solution :

My understanding from problem statement is that I have to create a script that will enable ssh login for given user in remote ubuntu servers. After creating this script, we will run this script locally and it will enable ssh for given user in all the servers.

Assumptions
1.) Remote servers have openssh already installed in them.
2.) Permitrootlogin is required to be yes. So that we can login into server as root, as we have to make some changes in /**etc/ssh/ sshd_config** to enable ssh login for a user.

AllowUsers <space>Username1<space>Username2

This line must be added in sshd_config at each server.

Approach
I have written a python script in which I used paramiko (ssh implementation of python) to go into the servers as a root. Then in each server I checked whether "AllowUsers username" line is there or not. If it is already present, i will append new username to this line else I will create this line myself.

Steps to run code

1.) First change/add the ip and root passwords for all the servers in the list servers and root_password respectively.

2.) Run script using given command

python3 Assignment.py <username>