Homework: Linux. Remote control using SSH

1 Create a new virtual machine (VM) or use existing one (local machine)

 - using existing one with CentOS 8 Stream

2 Install SSH client (if it's installed yet) (local machine)

 - already installed, but for CentOS it is:

$ sudo dnf -y install openssh-clients (and $ sudo apt-get install -y openssh-client for Debian/Ubuntu)

3 Create private and public key pair (local machine)

```
[ls@jscp4e ~]$ ssh-keygen -t ed25519 -f testvm_ed25519 -q -N ""
```

4 Install SSH server package
(if it's installed yet)

$ sudo dnf -y install openssh-server ($ sudo apt-get -y install openssh-server for Debian/Ubuntu)

5 Create mysshfriend user with password (remote server)

```
[someuser@testvm ~]$ useradd mysshfriend; passwd mysshfriend
```

6 Connect to VM as mysshfriend user local machine

```
[ls@jscp4e ~]$ ssh mysshfriend@testvm
The authenticity of host 'testvm (192.168.168.192)' can't be established.
ED25519 key fingerprint is SHA256:dGWMwLj/InpbC/Qi+uHCrTqb+3IFWSFDQM33YbYTa2I.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? Yes
Warning: Permanently added 'localhost' (ED25519) to the list of known hosts.
mysshfriend@testvm's password:
[ mysshfriend@testvm ~]$
```

7 Add public key to mysshfriend user remote server

We can copy key from our host and insert it into ~/.ssh/authorized_keys manually

Or we can just excute from our «host ssh-copy-id»

```
[ls@jscp4e ~]$ ssh-copy-id mysshfriend@testvm
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed:
"/home/ls/.ssh/id_ed25519.pub"
The authenticity of host 'testvm (192.168.168.192)' can't be established.
ECDSA key fingerprint is SHA256:vthzxLIDjH0Aa32PQcF3S7jibIjSUrm6ww/1XsOnzhY.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any
that are already installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it
is to install the new keys
(mysshfriend@testvm) Password:

Number of key(s) added: 1

Now try logging into the machine, with:   "ssh 'mysshfriend@testvm'"
and check to make sure that only the key(s) you wanted were added.
```

8 Connect to VM as mysshfriend user

```
[ls@jscp4e ~]$ ssh mysshfriend@testvm
[ mysshfriend@testvm ~]$ uname -a
Linux testvm 5.14.12-1.el8.elrepo.x86_64 #1 SMP Tue Oct 12 08:42:05 EDT 2021 x86_64
x86_64 x86_64 GNU/Linux
```