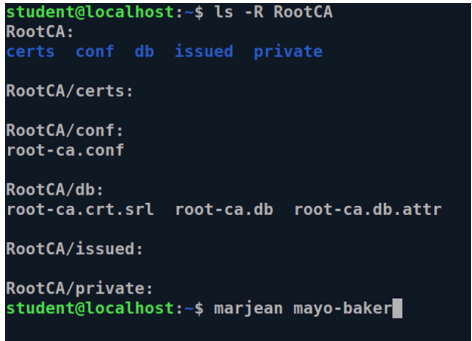
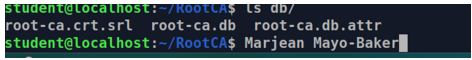
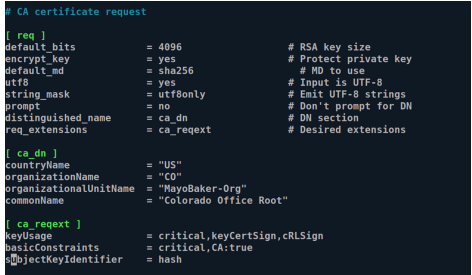
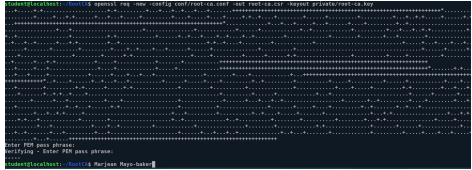





Tasks Performed

Task	Description	Screenshot
Rename Hostname	Set to mmayobaker using sudo hostnamectl set-hostname mmayobaker	<pre>### #set Hostname ### if ["\$(hostnamectl --static)" != "\$hostname"]; then sudo hostnamectl set-hostname "\$currentName" echo "Host name changed to \$hostname" else echo "Host name is already set " fi</pre>
Set Time Zone	Configured system timezone to America/Denver	<pre>### #set timezone ### echo "Current Timezone is: \$currentTime" if ["\$Current" != "\$changedTime"]; then sudo timedatectl set-timezone "\$changedTime" echo "Time was changed" else echo "Timezone is already set to \$changedTime" fi</pre>
Log Running Processes	Used ps aux >> process.txt to log all active processes	<pre>### #save running process ### echo -e "==== list of running processes =====> process.txt" ps aux >> process.txt echo "Process list saved to: process.txt" ### #set lockscreen to 3 mins ### settings set org.gnome.desktop.session idle-delay 180 settings set org.gnome.desktop.screensaver lock-delay 0 echo "Confirmed idle time: '\$(settings get org.gnome.desktop.session idle-delay)'" echo " Confirmed lock enabled: '\$(settings get org.gnome.desktop.screensaver lock-delay)'"</pre>
Enforce Idle Lockout	Used gsettings to enforce session lockout after 3 minutes of inactivity	<pre>### #set lockscreen to 3 mins ### settings set org.gnome.desktop.session idle-delay 180 settings set org.gnome.desktop.screensaver lock-delay 0 echo "Confirmed idle time: '\$(settings get org.gnome.desktop.session idle-delay)'" echo " Confirmed lock enabled: '\$(settings get org.gnome.desktop.screensaver lock-delay)'"</pre>
Export Security Log	Extracted last 50 lines from /var/log/syslog into security_log_may_baker.txt	<pre>### #save last 50 syslog entries ### tail -n 50 /var/log/syslog >SecurityLog_Mayo-Baker.txt echo "Last 50 lines of syslog was saved to SecurityLog_Mayo-Baker.txt"</pre>
Final Script	Created and executed finalScript.sh to automate above steps	<pre>#!/bin/bash #MayoBaker #CYB 380 FINAL Project #April 28 2025 #Variable names hostname="Mmayobaker" currentName=\$(hostnamectl --static) currentTime=\$(timedatectl show --property=Timezone --value) changedTime="America/Denver" #set Hostname ### if ["\$(hostnamectl --static)" != "\$hostname"]; then sudo hostnamectl set-hostname "\$currentName" echo "Host name changed to \$hostname" else echo "Host name is already set " fi #set timezone ### echo "Current Timezone is: \$currentTime" if ["\$Current" != "\$changedTime"]; then sudo timedatectl set-timezone "\$changedTime" echo "Time was changed" else echo "Timezone is already set to \$changedTime" fi ### #save running process ### echo -e "==== list of running processes =====> process.txt" ps aux >> process.txt echo "Process list saved to: process.txt" ### #set lockscreen to 3 mins ### settings set org.gnome.desktop.session idle-delay 180 settings set org.gnome.desktop.screensaver lock-delay 0 echo "Confirmed idle time: '\$(settings get org.gnome.desktop.session idle-delay)'" echo " Confirmed lock enabled: '\$(settings get org.gnome.desktop.screensaver lock-delay)'" ### #save last 50 syslog entries ### tail -n 50 /var/log/syslog >SecurityLog_Mayo-Baker.txt echo "Last 50 lines of syslog was saved to SecurityLog_Mayo-Baker.txt"</pre>

Task	Description	Screenshot
Directory Tree Display	Used <code>ls -R</code> to view directory structure of RootCA	
DB Subfolder Listing	Listed subfolders in <code>db/</code> from RootCA directory	
CA Config + Cert Request	Edited <code>root-ca.conf</code> , then created CSR and private key using OpenSSL	
Self-Signed Certificate	Signed the CSR with CA private key using <code>openssl ca -selfsign</code> command	
File Verification	Verified <code>private/</code> , <code>issued/</code> , and <code>.csr</code> files using <code>ls -l</code>	

Repository Structure

```

secure-host-hardening-and-pki/ └─ finalScript.sh └─ process.txt └─
security_log_may_baker.txt └─ RootCA/ └─ conf/ └─ root-ca.conf └─
private/ └─ root-ca.key └─ issued/ └─ root-ca.crt └─ db/ └─ root-
ca.csr └─ screenshots/ # (Optional: all screenshots used in README) └─ README.md

```