

## Lab 2 Part 4: Digital Signature of the asciinema file

- A. We signed our Team8\_lab2.cast file by generating a hash using openssl dgst, then we used openssl rsautl to sign and verify the signature file as shown below.

```
user@ubuntu:~$  
user@ubuntu:~$ openssl dgst -sha256 Team8_lab2.cast > hash  
user@ubuntu:~$  
user@ubuntu:~$ cat hash  
SHA256(Team8_lab2.cast)= 713b3fdc201585188e5da69b42ff04d715f009d967bac34ada600fb7ac82e44f  
user@ubuntu:~$  
user@ubuntu:~$  
user@ubuntu:~$ openssl rsautl -sign -inkey receiver_privatekey.priv -in hash >team8_lab2_cast.signed  
user@ubuntu:~$  
user@ubuntu:~$  
user@ubuntu:~$ openssl rsautl -verify -inkey receiver_publickey.pub -pubin -in team8_lab2_cast.signed  
SHA256(Team8_lab2.cast)= 713b3fdc201585188e5da69b42ff04d715f009d967bac34ada600fb7ac82e44f  
user@ubuntu:~$  
user@ubuntu:~$
```

- B. We also created a resubmit subfolder inside lab2 folder on the Master server.

Created another signed file named team8\_lab2\_cast2.signed by using openssl dgst only with the same sha256 algorithm and the same private key as seen below.

```
user@ubuntu:~$  
user@ubuntu:~$ openssl dgst -sha256 -sign receiver_privatekey.priv -out team8_lab2_cast2.signed Team  
8_lab2.cast  
user@ubuntu:~$ openssl dgst -sha256 -verify receiver_publickey.pub -signature team8_lab2_cast2.signed  
Team8_lab2.cast  
Verified OK  
user@ubuntu:~$
```