

Criptografía y Blockchain

Módulo 3 - Resolución del laboratorio

Resolución del ejercicio

1.

```
(kali@kali)-[~]  
$ seq 20000 > muestra.txt
```

2.

```
$ openssl genpkey -algorithm EC -pkeyopt  
ec_paramgen_curve:secp521r1 -out ec_privada  
.pem
```

3.

```
$ openssl pkey -in ec_privada.pem -pubout  
-out ec_publica.pem
```



4.

```
└─$ openssl pkeyutl -sign -digest sha3-512  
-inkey ec_privada.pem -in muestra.txt -rawi  
n -out muestra.txt.signature
```

6.

```
└─(kali㉿kali)-[~]  
└─$ cksum muestra.txt*  
3231941463 108894 muestra.txt  
3371777690 137 muestra.txt.signature
```

7.

```
└─(kali㉿kali)-[~]  
└─$ openssl pkeyutl -verify -digest sha3-51  
2 -inkey ec_privada.pem -in muestra.txt -ra  
win -sigfile muestra.txt.signature  
Signature Verified Successfully
```

8.

```
(kali@kali)-[~]  
$ echo "algo mas" >> muestra.txt
```

9.

```
(kali@kali)-[~]  
$ openssl pkeyutl -verify -digest sha3-51  
2 -inkey ec_privada.pem -in muestra.txt -ra  
win -sigfile muestra.txt.signature  
Signature Verification Failure
```



**¡Sigamos
trabajando!**

