

# Laboratorio no. 3 Cifrado de Información - parte 2

Marco Jurado 20308

```
In [ ]: !openssl rand -hex 16 > clave.txt
```

```
In [ ]: with open('clave.txt', 'r') as file:
        key = file.read().strip()
```

```
In [ ]: !openssl enc -aes-128-ecb -nosalt -in tux_bw_content.ppm -out tux_bw_content_encrypt
```

```
In [ ]: !magick convert tux_bw_content_encrypt.ppm resultado_final.jpg
```

```
convert: improper image header `tux_bw_content_encrypt.ppm' @ error/pnm.c/ReadPNMImage/343.
convert: no images defined `resultado_final.jpg' @ error/convert.c/ConvertImageCommand/3362.
```

Repetimos con CBC

```
In [ ]: !openssl rand -hex 16 > clave_cbc.txt
```

```
In [ ]: !openssl rand -hex 16 > iv.txt
```

```
In [ ]: # Leer y mostrar el contenido de clave_cbc.txt y iv.txt
        with open('clave_cbc.txt', 'r') as file:
            key = file.read().strip()
            print(f"Clave (length {len(key)}): {key}")

        with open('iv.txt', 'r') as file:
            iv_cbc = file.read().strip()
            print(f"IV (length {len(iv_cbc)}): {iv_cbc}")
```

Clave (length 32): b76fd23a41e175209025d8be5cf242b5

IV (length 32): 50810778630075c43f8a12fd402c22a1

```
In [ ]: !openssl enc -aes-128-cbc -nosalt -in tux_bw_content.ppm -out tux_bw_encrypted_cbc.
```

```
In [ ]: !magick convert tux_bw_encrypted_cbc.ppm resultado_final_2.jpg
```