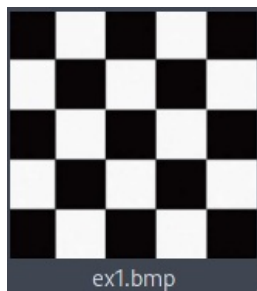


TP3 Report

This work has the objective to encrypt an image with both modes EBC and CBC and compare the visual result.

For that we created a python script to easily encrypt and decrypt images using these modes

The file used for testing was a bmp image of a chess board pattern (`ex1.bmp`).



```
bash python3 image_encrypt.py
```

Encrypting this file results in an unreadable file because the bmp image metadata is also encrypted, so we execute the following command to visualize the content of it:

Note: The encrypted image will be stored in `ex1.enc.bmp` and the decrypted image will be stored in `ex1.dec.bmp`

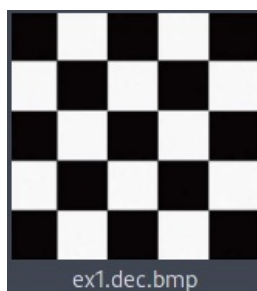
```
bash dd if=ex1.bmp of=ex1.enc.bmp bs=1 count=54 conv=notrunc
```

Using ECB

As we can see by the results the EBC encryption mode is not completely secure as we can check for patterns of the original image



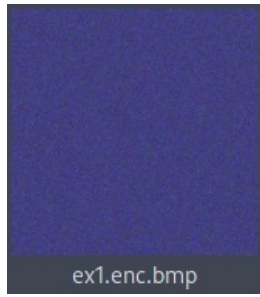
And the decryption was successful



Using CBC

As we can see by the results the CBC encryption mode turns the encrypted image in a matrix of complete unreadable

pixels



And the decryption was successful

