### Category:

Steganography

#### Name:

Marker

# Message:

You are provided with a PDF file, but something's hidden beneath the surface! Can you find the hidden flag?

### Hint:

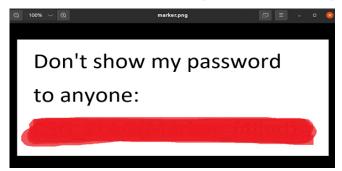
- The first step to unlocking the mystery is converting the PDF to PNG. Without it, you'll be missing the bigger picture... literally!
- The marker colors aren't just for show! Look closely at the shades—there's something slightly different about them. Don't trust your eyes alone!

## **Objective:**

Your task is to convert "marker.pdf" to a PNG file, then analyze the file to reveal the flag.

#### **Instructions:**

1. Start by loading "marker.pdf" in your preferred environment. You will notice that the file cannot be opened as a standard PDF. This is because "marker.pdf" is not a valid PDF file but is actually a PNG file, as indicated by its magic number. Use a tool such as ImageMagick to convert the file to a PNG format, which will allow you to view the underlying image.



2. Upon close examination of the image, you may observe subtle differences in the marker color, along with black text obscured by the red marker. This indicates that the pixel data has been modified. Rather than relying on visual inspection alone, use a steganography tool such as StegOnline. Select the "LSB Half" option to reveal the hidden content within the pixel data.

# Don't show my password to anyone:



Flag is:

CSG\_FLAG{M4rker\_f4iled}

# References:

• StegOnline https://georgeom.net/StegOnline