vishwaCTF

CHALLENGE NAME: [The Encrypted Canvas]

DEV : [Rakshika Batra and Yash Swami]
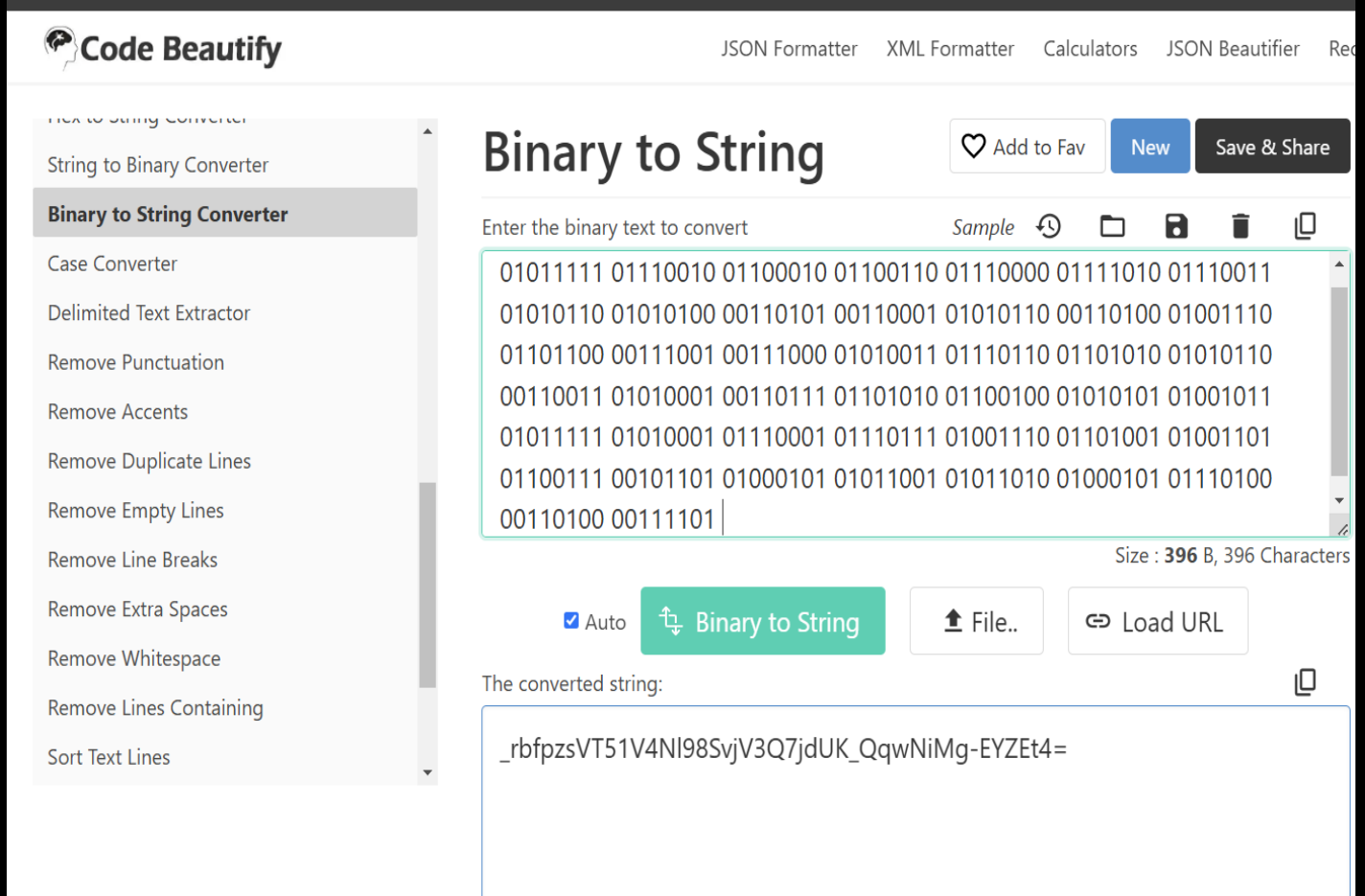
CATEGORY: [Digital

Forensics]

LEVEL: [MEDIUM]

2025

Challenge Description:
A mysterious artist has concealed their masterpiece, leaving behind an encrypted file. The key to unlocking it is hidden in plain sight, waiting to be discovered. Can you unveil the hidden masterpiece and extract the flag?

Solution:

Converting the binary string given in keysecret file to string.

Decrypting the given encrypted file using fernet to get the gif

```python
from cryptography.fernet import Fernet


key = b'_rbfpzsVT51V4Nl98SvjV3Q7jdUK_QqwNiMg-EYZEt4='
cipher = Fernet(key)
from google.colab import files
uploaded = files.upload()

encrypted_file_name = list(uploaded.keys())[0]
with open(encrypted_file_name, "rb") as encrypted_file:
    encrypted_data = encrypted_file.read()


decrypted_data = cipher.decrypt(encrypted_data)
decrypted_file_name = "decrypted_file.gif"
with open(decrypted_file_name, "wb") as decrypted_file:
    decrypted_file.write(decrypted_data)

print(f"Decrypted file saved as: {decrypted_file_name}")
```

Download the gif

```python
[ ] files.download(decrypted_file_name)
```

The GIF must be split (e.g. using https://ezgif.com/split) and then each frame must be merged in the same final image, ignoring white background.

VISHWACTF{F1GH7BA6K}

Flag: VishwaCtf{F1GHTBA6K}