

First convert the format from a hex dump to just the data. Then from the challenge name you determine that something must be done 30 times. Cyber chef shows you that this data is in Base 64. You might think that then this must be decoded by base64 30 times. To do this you would write a script like this one and then get the flag.

```
import base64

baseString = 'STOUTCTF{djfRQP4yBWjbcnEEixBHvUvta8iZd5Fm}' # Edit this base String
to encode/decode
bytes_object = baseString.encode('utf-8')

def main():
    print("Would you like to encode or decode?")
    print("1. Encode")
    print("2. Decode")
    choice = input("Enter your choice: ")

    if choice == '1':
        print("Encoding")
        encoded = encode(bytes_object)

        # Write Encoded to a txt file
        with open('encoded.txt', 'w') as f:
            f.write(encoded.decode('utf-8'))

    elif choice == '2':
        print("Decoding")
        # Read Encoded from a txt file
        with open('encoded.txt', 'r') as f:
            data = f.read()

        # Convert the string data to bytes
        decoded = decode(data.encode('utf-8'))
        print(decoded.decode('utf-8'))

    else:
        print("Invalid choice")

def encode(data):
    for i in range(30):
        data = base64.b64encode(data)
    return data
```

```
def decode(data):  
    for i in range(30):  
        data = base64.b64decode(data)  
    return data  
  
main() # Run the main function
```