**Luis Suarez Bites – Writeup**

**Description**

Get your pillows ready !! Tried using different modules in python ? Luis Suarez Bits can be used to hide s3cr3t t3xt :)

**Approach**

The prompt contains hints which are:

* Luis Suarez bites – least significant bit steganography method.
* Pillow – PIL module from python helps with pixel manipulation.

**Process:**

sudo pip install pillow to get the pillow module

from PIL import Image

def decode\_text\_from\_image(image\_path):

    image = Image.open(image\_path)

    binary\_text = ""

opens the image from its path

    for x in range(image.width):

        for y in range(image.height):

            pixel = list(image.getpixel((x, y)))

            for i in range(3):

                binary\_text += format(pixel[i], '08b')[-1]

here we iterate through each pixel. the .getpixel function will return tuple of three rgb values ,then it is typecasted it to a list

the pixel list is iterated through 3 r g b values in integer values.

The integer is converted into 8 bit binary and the last bit is extracted

Which is the Least Significant Bit.

These bits are appended.

    delimiter\_index = binary\_text.find("1111111111111110")

    if delimiter\_index != -1:

        binary\_text = binary\_text[:delimiter\_index]

A delimiter is placed to mark the end of the secret message.the bits after the

Delimiter are removed including the delimiter part.

    decoded\_text = ""

    for i in range(0, len(binary\_text), 8):

        byte = binary\_text[i:i+8]

        decoded\_text += chr(int(byte, 2))

now the binary string is iterated and every 8 bits are converted to 1 byte and

then to char values to output it in ASCII.

    return decoded\_text

Return it 😊.