VishwaCTF

CHALLENGE NAME : CARTESIAN ASTRONOMY

DEV : YOHAAN DHURI

CATEGORY : STEGANOGRAPHY

LEVEL : EASY

2024

DESCRIPTION:

In the image of darkness you need to seek for light. Align the numeric echoes where like goes with like allowing their celestial bond to transcend mere symbols

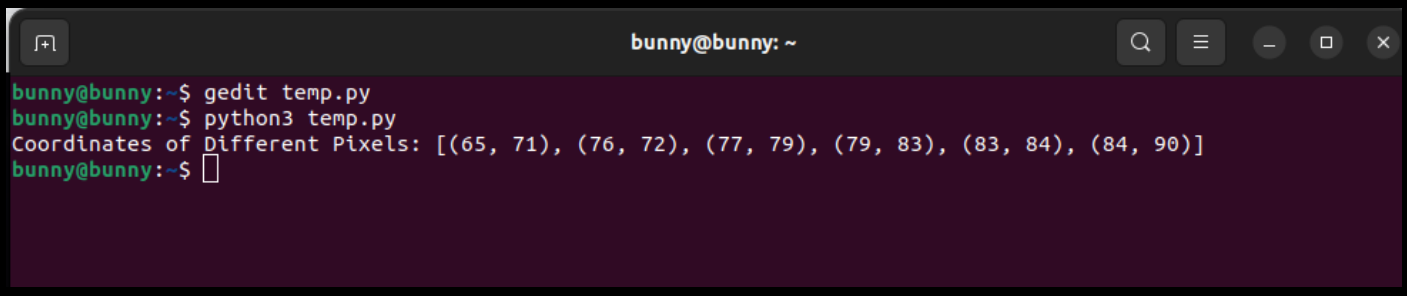
Seperate the words with _ and submit the flag in VishwaCTF{}

Here we need to use the key words like “CARTESIAN”, “NUMERIC”, “LIKE GOES WITH LIKE”,

“SYSMBOLS” and the sentence “in the image of darkness you need to seek for ligth.”

So accutally all pixels are not exactly black. There are few whose RGB value is changed a bit. So we need to write code and find the X and Y coordinates of those pixels.These coordinates represent ASCII values. Then we have to convert all of them from ACSII to character. Group the X coordinates together and so the Y. We Then get the flag.

```python
from PIL import Image

def find_different_pixels(image_path):
    # Open the image
    img = Image.open(image_path)

    # Get the RGB values of the first pixel
    reference_pixel = img.getpixel((0, 0))

    # Get the dimensions of the image
    width, height = img.size

    different_pixels = []

    # Iterate through each pixel starting from (1, 0)
    for y in range(height):
        for x in range(width):
            # Skip the first pixel as it serves as the reference
            if x == 0 and y == 0:
                continue

            # Get RGB values of the current pixel
            current_pixel = img.getpixel((x, y))

            # Check if the current pixel differs from the reference pixel
            if current_pixel != reference_pixel:
                # Store the coordinates of different pixels
                different_pixels.append((x, y))

    return different_pixels

# Provide the path to the image
image_path = "path/to/your/image.png"

# Call the function to find different pixels
different_pixels = find_different_pixels(image_path)

# Display or use different_pixels as needed
print("Coordinates of Different Pixels:", different_pixels)
```



Once converting to characters we get the flag: VishwaCTF{ALMOST_GHOSTZ}