

```

import imageio as img
import numpy as np
import matplotlib.pyplot as plt

def rotateImage(image, degree):
    radian_deg = np.radians(degree)
    cos_deg, sin_deg = np.cos(radian_deg), np.sin(radian_deg)

    height, width = image.shape[:2]
    max_dim = int(np.sqrt(height**2 + width**2))
    outputImage = np.zeros((max_dim, max_dim, 3), dtype=image.dtype)

    centerY, centerX = max_dim // 2, max_dim // 2

    for y in range(-height // 2, height // 2):
        for x in range(-width // 2, width // 2):
            newX = int(cos_deg * x - sin_deg * y) + centerX
            newY = int(sin_deg * x + cos_deg * y) + centerY

            if 0 <= newX < max_dim and 0 <= newY < max_dim:
                outputImage[newY, newX] = image[y + height // 2, x + width // 2]

    return outputImage

image = img.imread('/content/Tiger.jpg')

rotated_image = rotateImage(image, 45)

plt.subplot(1, 2, 1)
plt.imshow(image)

plt.subplot(1, 2, 2)
plt.imshow(rotated_image)

plt.show()

```

↳ <ipython-input-16-16cda3a27b94>:25: DeprecationWarning: Starting with ImageIO v3 the behavior of this function will switch to that of ii  
 image = img.imread('/content/Tiger.jpg')



