

5. Perform Rotation of an image to clockwise and counter clockwise direction.

PROGRAM:

```
EXP-5.py - C:\Users\reddy\OneDrive\Desktop\COMPUTER VISION\EXP-5.py (3.11.9)
File Edit Format Run Options Window Help
import cv2

# Read image
img = cv2.imread("C:/Users/reddy/OneDrive/Desktop/COMPUTER VISION/iii.jpg")

# Get image size
(h, w) = img.shape[:2]
center = (w // 2, h // 2)

# Clockwise rotation (45 degrees)
rot_clock = cv2.getRotationMatrix2D(center, -45, 1.0)
clockwise = cv2.warpAffine(img, rot_clock, (w, h))

# Counter-clockwise rotation (45 degrees)
rot_counter = cv2.getRotationMatrix2D(center, 45, 1.0)
counterclockwise = cv2.warpAffine(img, rot_counter, (w, h))

# Display images
cv2.imshow("Original Image", img)
cv2.imshow("Clockwise Rotation", clockwise)
cv2.imshow("Counter-Clockwise Rotation", counterclockwise)

cv2.waitKey(0)
cv2.destroyAllWindows()

Ln: 1 Col: 0
```



OUTPUT:

