## 29. Morphological operations based on OpenCV using Morphological Gradient technique.

## PROGRAM:

EXP-29.py - C:\Users\reddy\OneDrive\Desktop\COMPUTER VISION\EXP-29.py (3.11.9)

File Edit Format Run Options Window Help

```
import cv2
import numpy as np

# Step 1: Read image
img = cv2.imread(r"C:\Users\reddy\OneDrive\Desktop\COMPUTER VISION\iii.jpg")

if img is None:
    print("Image not found")
    exit()

# Step 2: Convert to grayscale
gray = cv2.cvtColor(img, cv2.COLOR_BGR2GRAY)

# Step 3: Create kernel
kernel = np.ones((5,5), np.uint8)

# Step 4: Apply Morphological Gradient
gradient = cv2.morphologyEx(gray, cv2.MORPH_GRADIENT, kernel)

# Step 5: Display images
cv2.imshow("Original Image", gray)
cv2.imshow("Morphological Gradient", gradient)

cv2.waitKey(0)
cv2.destroyAllWindows()
```

Ln: 1 Col: 0

30°C Partly sunny Search 4:38 PM 2/13/2026

## OUTPUT: