**Symbol recognition**

pip install opencv-python pytesseract

import cv2

import pytesseract

# Load the image

image\_path = "symbol\_image.png"

image = cv2.imread(image\_path)

# Convert to grayscale

gray\_image = cv2.cvtColor(image, cv2.COLOR\_BGR2GRAY)

# Apply thresholding to make the image binary

\_, binary\_image = cv2.threshold(gray\_image, 127, 255, cv2.THRESH\_BINARY\_INV)

# Optional: Apply additional preprocessing (e.g., noise reduction, morphological operations)

# kernel = cv2.getStructuringElement(cv2.MORPH\_RECT, (3, 3))

# processed\_image = cv2.morphologyEx(binary\_image, cv2.MORPH\_OPEN, kernel)

# For this example, let's stick with the simple binary image

processed\_image = binary\_image

# Specify Tesseract configurations (optional)

custom\_config = r'--oem 3 --psm 6' # --psm 6 is for recognizing blocks of text

# Recognize text/symbols from the processed image

recognized\_text = pytesseract.image\_to\_string(processed\_image, config=custom\_config)

print("Recognized Symbols/Text:")

print(recognized\_text)