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!pip install opencv-python
!sudo apt install tesseract-ocr
!pip install pytesseract

# Import required packages
import cv2
import pytesseract

# Mention the installed location of Tesseract-OCR in your system
pytesseract.pytesseract.tesseract_cmd = '/usr/bin/tesseract'

# Read image from which text needs to be extracted
img = cv2.imread("licence_plate.jpeg")

# Preprocessing the image starts

# Convert the image to gray scale
gray = cv2.cvtColor(img, cv2.COLOR_BGR2GRAY)

# Performing OTSU threshold
ret, thresh1 = cv2.threshold(gray, 0, 255, cv2.THRESH_OTSU |
cv2.THRESH_BINARY_INV)

# Specify structure shape and kernel size.
# Kernel size increases or decreases the area
# of the rectangle to be detected.
# A smaller value like (10, 10) will detect
# each word instead of a sentence.
rect_kernel = cv2.getStructuringElement(cv2.MORPH_RECT, (18, 18))

# Applying dilation on the threshold image
dilation = cv2.dilate(thresh1, rect_kernel, iterations = 1)

# Finding contours
contours, hierarchy = cv2.findContours(dilation, cv2.RETR_EXTERNAL,
cv2.CHAIN_APPROX_NONE)

# Creating a copy of image
im2 = img.copy()

# A text file is created and flushed
file = open("recognized.txt", "w+")
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file.write("")
file.close()

# Looping through the identified contours
# Then rectangular part is cropped and passed on
# to pytesseract for extracting text from it
# Extracted text is then written into the text file
for cnt in contours:
    x, y, w, h = cv2.boundingRect(cnt)

    # Drawing a rectangle on copied image
    rect = cv2.rectangle(im2, (x, y), (x + w, y + h), (0, 255, 0), 2)

    # Cropping the text block for giving input to OCR
    cropped = im2[y:y + h, x:x + w]

    # Open the file in append mode
    file = open("recognized.txt", "a")

    # Apply OCR on the cropped image
    text = pytesseract.image_to_string(cropped)

    # Appending the text into file
    file.write(text)
    file.write("\n")

    # Close the file
    file.close
```

**use the following to see the result:**

```
!cat recognized.txt
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