EXP-11-SCENE TEXT DETECTION

AIM: To implement scene text detection using python.

ALGORITHM:

Step1- Import Required Libraries

Step2- Set Tesseract Executable Path

Step3- Define Function to Extract Text from Image

Step4- Read the Image

Step5- Convert to Grayscale

Step6- Perform OCR

Step7- Specify the path to the image file (image_path).

Step8- Print the extracted text.

PROGRAM:

```
import cv2
import pytesseract

# Set the path to Tesseract executable
pytesseract.pytesseract.tesseract_cmd =
r'C:\Users\student.SCASA1\AppData\Local\Programs\Tesseract-
OCR\tesseract.exe'

def extract_text_from_image(image_path):
    # Read image using OpenCV
    image = cv2.imread(image_path)
    # Convert image to grayscale
    gray = cv2.cvtColor(image, cv2.COLOR_BGR2GRAY)
    # Use Tesseract to do OCR on the image
    text = pytesseract.image_to_string(gray)
    return text

# Path to the image file
image_path = './image.jpg'
# Extract text from the image
```

```
extracted_text = extract_text_from_image(image_path)
# Print the extracted text
print("Extracted Text:")
print(extracted_text)
```

INPUT:

OUTPUT:

Extracted Text:

CAUTION

SCHOOL AHEAD

DRIVE SLOW

Requirements: Install tessearct OCR from the link: https://github.com/UBMannheim/tesseract/releases/download/v5.4.0.20240606/tesseract-ocr-w64-setup5.4.0.20240606.exe

RESULT: Hence the implementation of scene text detection using python is completed and executed successfully.