import cv2

import numpy as np

# Load an image

img = cv2.imread('a.webp', 1)

# Task 1: Remove Background

gray = cv2.cvtColor(img, cv2.COLOR\_BGR2GRAY)

\_, mask = cv2.threshold(gray, 200, 255, cv2.THRESH\_BINARY)

mask\_inv = cv2.bitwise\_not(mask)

background = np.full\_like(img, (255, 255, 255), dtype=np.uint8)

result\_bg\_removed = cv2.bitwise\_and(img, img, mask=mask\_inv) + cv2.bitwise\_and(background, background, mask=mask)

# Task 2: Shifting

tx, ty = 100, 50

translation\_matrix = np.float32([[1, 0, tx], [0, 1, ty]])

shifted\_img = cv2.warpAffine(result\_bg\_removed, translation\_matrix, (result\_bg\_removed.shape[1], result\_bg\_removed.shape[0]))

# Task 3: Rotation 90 Degrees Clockwise

rotated\_img = cv2.rotate(shifted\_img, cv2.ROTATE\_90\_CLOCKWISE)

# Display the final result

cv2.imshow("Final Image", rotated\_img)

cv2.waitKey(0)

cv2.destroyAllWindows()