**5.Demonstrate enhancing and segmenting low contrast 2D images.**

import cv2

img = cv2.imread('DIP/image.jpg', cv2.IMREAD\_GRAYSCALE)

clahe = cv2.createCLAHE(clipLimit=2.0, tileGridSize=(8,8)) clahe\_img = clahe.apply(img)

thresh\_val, thresh\_img = cv2.threshold(clahe\_img, 0, 255,cv2.THRESH\_BINARY+cv2.THRESH\_OTSU)

hierarchy = cv2.findContours(thresh\_img, cv2.RETR\_EXTERNAL, cv2.CHAIN\_APPROX\_SIMPLE)

cv2.drawContours(img, contours, -1, (0, 0, 255), 2)

cv2.imshow('Original Image', img)

cv2.imshow('Enhanced Image', clahe\_img) cv2.imshow('Segmented Image', thresh\_img) cv2.waitKey(0)

cv2.destroyAllWindows()