import numpy as np  
  
import cv2  
   
  
# load the image, clone it for output, and then convert it to grayscale  
image = cv2.imread("3.png")  
##print(image)  
output = image.copy()  
gray = cv2.cvtColor(image, cv2.COLOR\_BGR2GRAY)  
# detect circles in the image  
circles = cv2.HoughCircles(gray, cv2.HOUGH\_GRADIENT, 1.2, 100)  
   
# ensure at least some circles were found  
if circles is not None:  
 # convert the (x, y) coordinates and radius of the circles to integers  
 circles = np.round(circles[0, :]).astype("int")  
   
 # loop over the (x, y) coordinates and radius of the circles  
 for (x, y, r) in circles:  
 # draw the circle in the output image, then draw a rectangle  
 # corresponding to the center of the circle  
 cv2.circle(output, (x, y), r, (0, 255, 0), 5)  
 cv2.rectangle(output, (x - 5, y - 5), (x + 5, y + 5), (0, 128, 255), -1)  
 #for circle in circles:  
   
   
 # show the output image  
 cv2.imshow("output", np.hstack([image, output]))  
 cv2.waitKey(0)