import cv2

cam = cv2.VideoCapture(0)

detector=cv2.CascadeClassifier('haarcascade\_frontalface\_default.xml')

Id=input('enter your id')

sampleNum=0

while(True):

ret, img = cam.read()

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

faces = detector.detectMultiScale(gray, 1.3, 5)

for (x,y,w,h) in faces:

cv2.rectangle(img,(x,y),(x+w,y+h),(255,0,0),2)

#incrementing sample number

sampleNum=sampleNum+1

#saving the captured face in the dataset folder

cv2.imwrite("dataSet/User."+Id +'.'+ str(sampleNum) + ".jpg", gray[y:y+h,x:x+w])

cv2.imshow('frame',img)

#wait for 100 miliseconds

if cv2.waitKey(100) & 0xFF == ord('q'):

break

# break if the sample number is morethan 20

elif sampleNum>100:

break

cam.release()

cv2.destroyAllWindows()