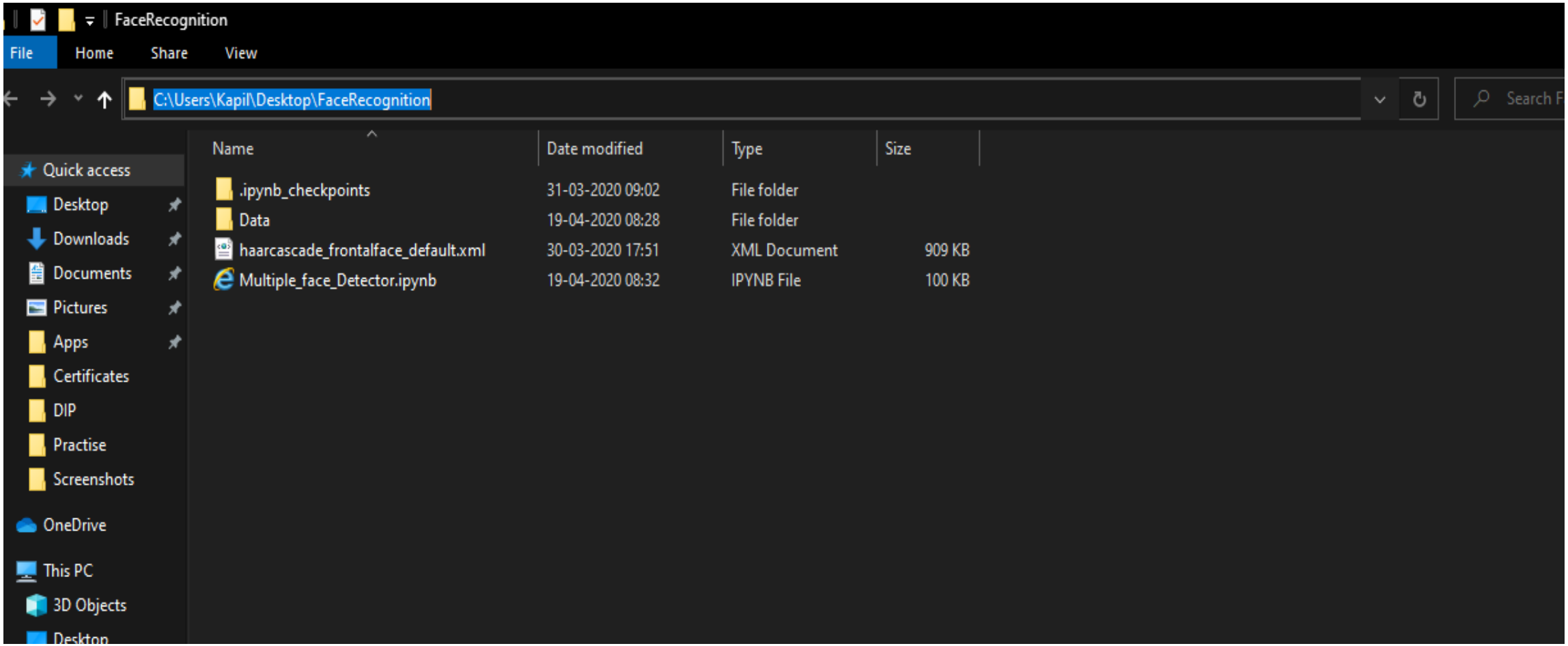
Step 1-> Create your FaceRecognition folder and save the file as shown below



Step 2-> Run the First cell of file

```
        cropped_face = img[y:y+h, x:x+w]

    return cropped_face

# Initialize Webcam
cap = cv2.VideoCapture(0)
count = 0

# Making the folder of new member
name1=input("Enter the Name of person:")
os.chdir("C:/Users/Kapil/Desktop/FaceRecognition/Data/")
os.system(f"mkdir {name1}")

# Collect 100 samples of your face from webcam input
while True:

    ret, frame = cap.read()
    if face_extractor(frame) is not None:
        count += 1
        face = cv2.resize(face_extractor(frame), (200, 200))
        face = cv2.cvtColor(face, cv2.COLOR_BGR2GRAY)

        # Save file in specified directory with unique name
        file_name_path = f'C:/Users/Kapil/Desktop/FaceRecognition/Data/{name1}/' + str(count) + '.jpg'
        cv2.imwrite(file_name_path, face)

        # Put count on images and display live count
        cv2.putText(face, str(count), (50, 50), cv2.FONT_HERSHEY_COMPLEX, 1, (0,255,0), 2)
        cv2.imshow('Face Cropper', face)

    else:
        print("Face not found")
        pass

    if cv2.waitKey(1) == 13 or count == 100: #13 is the Enter Key
        break

cap.release()
cv2.destroyAllWindows()
print("Collecting Samples Complete")
```

```
Enter the Name of person: Kapil
```

Step 3-> Collecting the images


```
    # Crop all faces found
    for (x,y,w,h) in faces:
        cropped_face = img[y:y+h, x:x+w]

    return cropped_face

itialize Webcam
= cv2.VideoCapture(0)
t = 0

king the folder of new member
1=input("Enter the Name of person:")
hdir("C:/Users/Kapil/Desktop/FaceRecognition/Data/")
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        count += 1
        face = cv2.resize(face_extractor(frame), (200, 200))
        face = cv2.cvtColor(face, cv2.COLOR_BGR2GRAY)

        # Save file in specified directory with unique name
        file_name_path = f'C:/Users/Kapil/Desktop/FaceRecognition/Data/{name1}/' + str(count) + '.jpg'
        cv2.imwrite(file_name_path, face)

        # Put count on images and display live count
        cv2.putText(face, str(count), (50, 50), cv2.FONT_HERSHEY_COMPLEX, 1, (0,255,0), 2)
        cv2.imshow('Face Cropper', face)

    else:
        print("Face not found")
        pass

    if cv2.waitKey(1) == 13 or count == 100: #13 is the Enter Key
        break

cap.release()
cv2.destroyAllWindows()
print("Collecting Samples Complete")
```
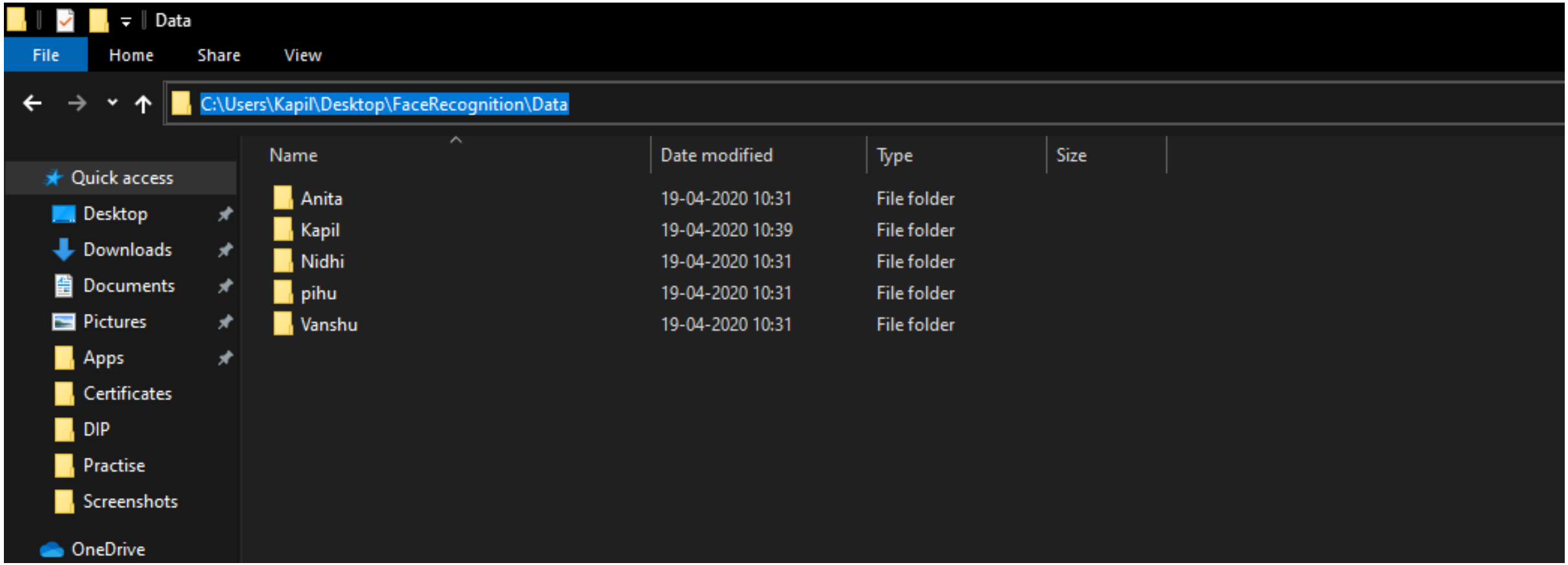
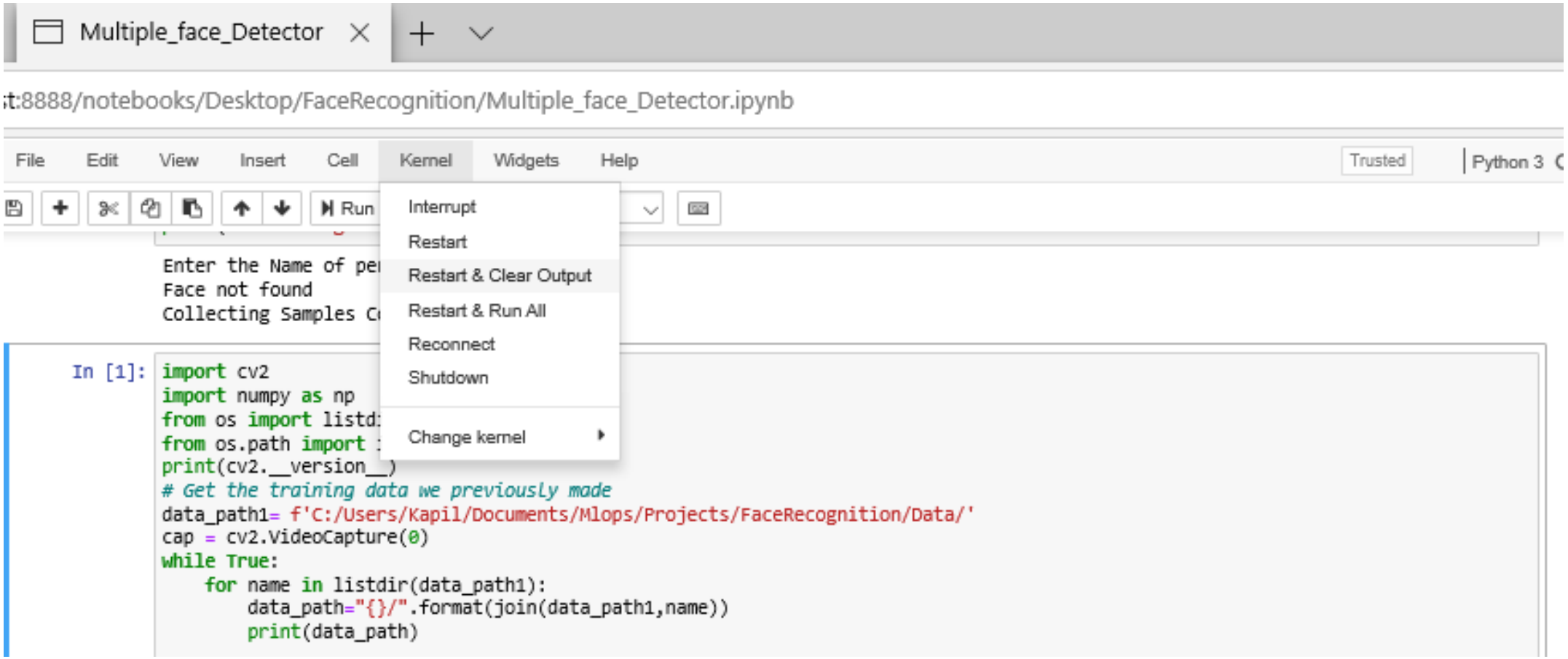

```
Enter the Name of person:Kapil
```

Step 4-> I have created multiple images of different person in different folder you can also store by continuously running the first cell



Step 4-> Restart the Kernel



Step 5-> Run the second cell once then your camera recognize the person according to your dataset and show his/her name on the screen
To terminate the camera press enter three times continuously .