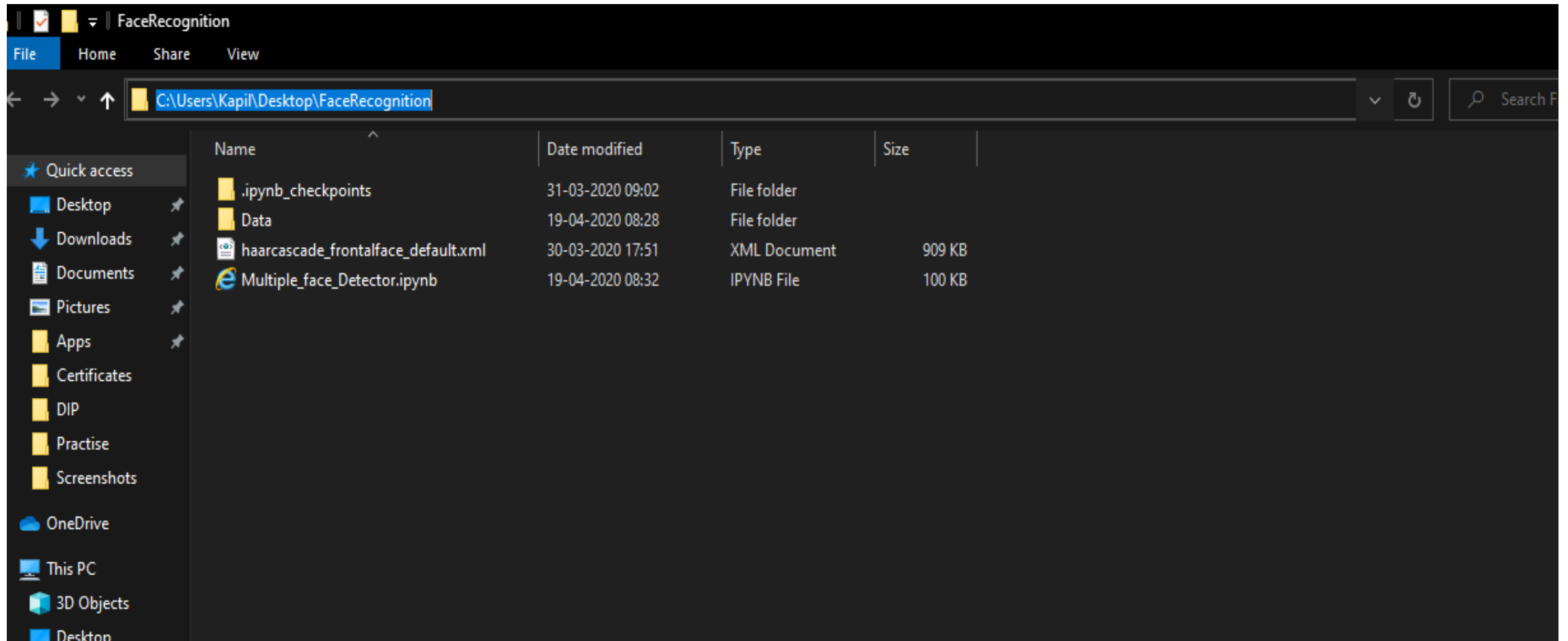


Step 1-> Create your FaceRecognition folder and save the file as shown below



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:

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

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

Asking the folder of new member
name1=input("Enter the Name of person:")
os.mkdir("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)

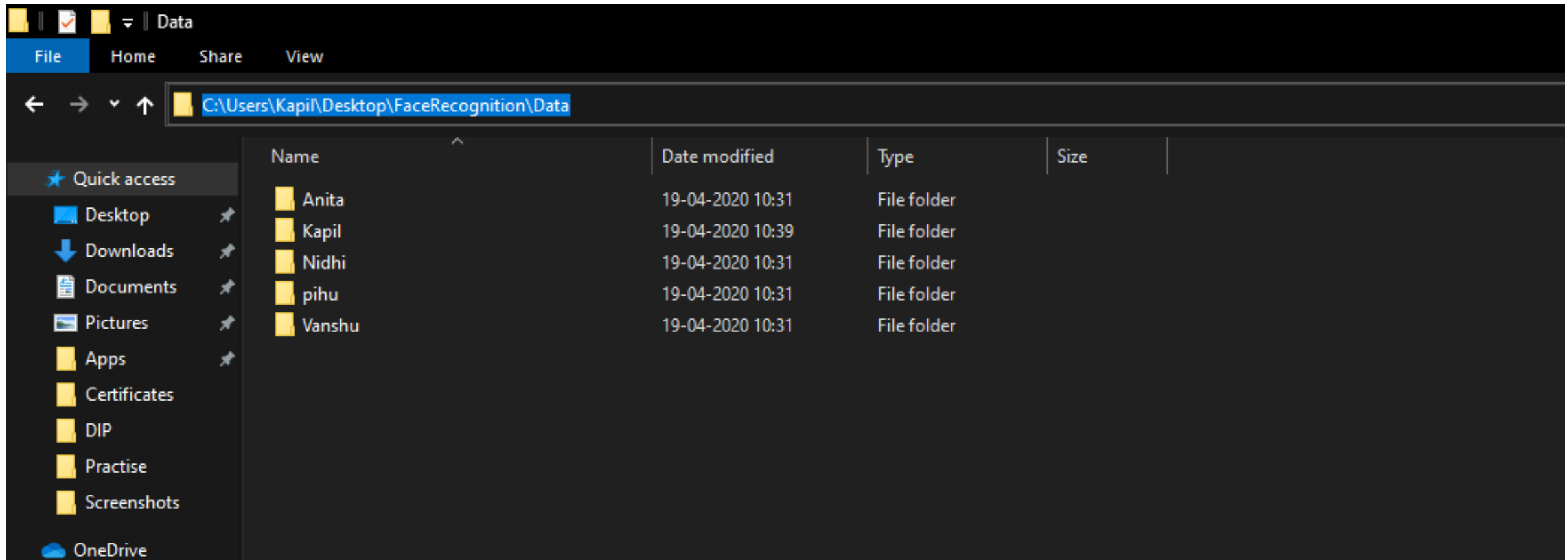
    else:
        print("Face not found")
        pass

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

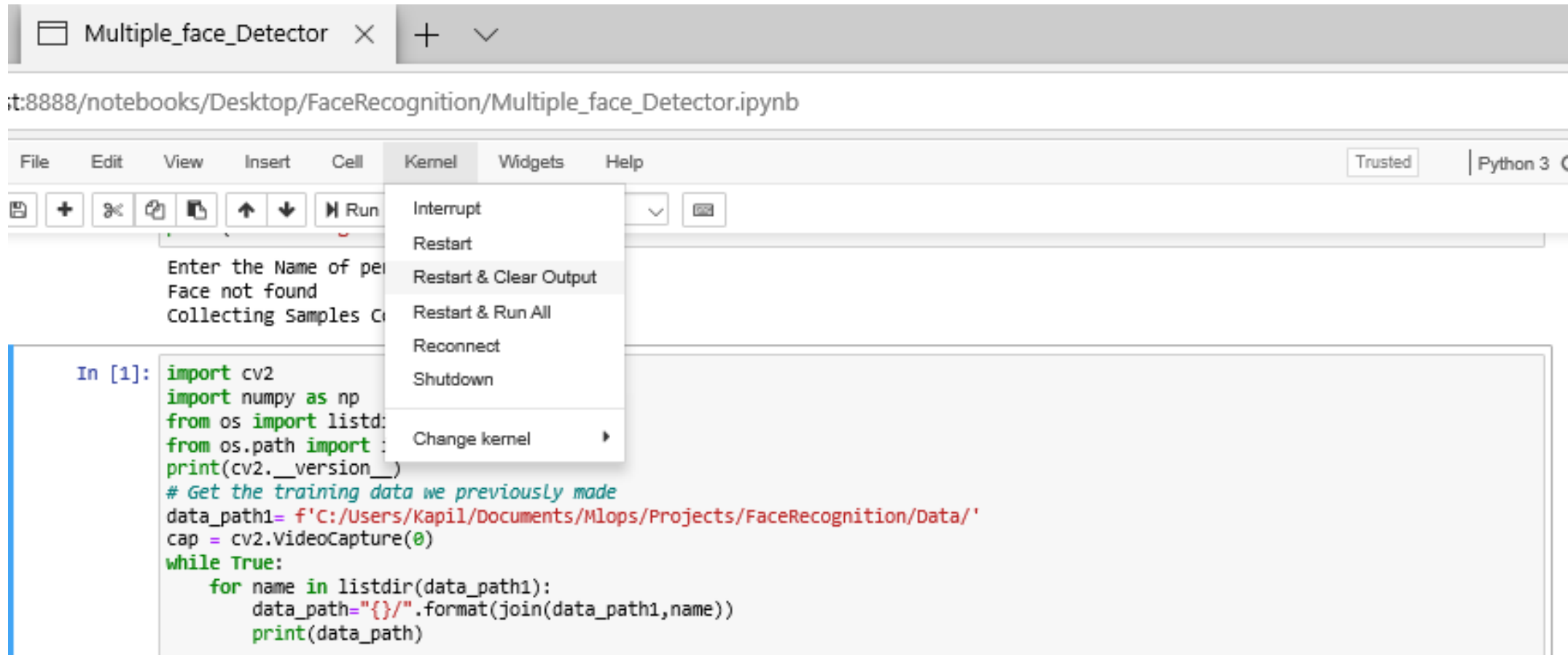
cap.release()
cv2.destroyAllWindows()
print("Collecting Samples Complete")
```

Enter the Name of person:Kapil

Step 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



The screenshot shows a Jupyter Notebook window titled "Multiple_face_Detector". The address bar displays the file path: `it:8888/notebooks/Desktop/FaceRecognition/Multiple_face_Detector.ipynb`. The top menu bar includes "File", "Edit", "View", "Insert", "Cell", "Kernel", "Widgets", and "Help". The "Kernel" menu is open, showing options: "Interrupt", "Restart", "Restart & Clear Output", "Restart & Run All", "Reconnect", "Shutdown", and "Change kernel". The notebook content shows a code cell with the following Python code:

```
In [1]: import cv2
import numpy as np
from os import listdir
from os.path import join
print(cv2.__version__)
# Get the training data we previously made
data_path1= f'C:/Users/Kapil/Documents/Mlops/Projects/FaceRecognition/Data/'
cap = cv2.VideoCapture(0)
while True:
    for name in listdir(data_path1):
        data_path= "{}"/".format(join(data_path1,name))
        print(data_path)
```

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 .

