38. Write a Python function to Count the number of faces for the given input image using Open CV.

```
import cv2


def count_faces_in_image(image_path):
    """
    Counts the number of faces in the given input image.
    """
    # Load Haar cascade
    face_cascade = cv2.CascadeClassifier(cv2.data.haarcascades +
"haarcascade_frontalface_default.xml")


    # Read image
    image = cv2.imread(image_path)
    if image is None:
        raise FileNotFoundError(f"Image not found: {image_path}")


    # Convert to grayscale
    gray = cv2.cvtColor(image, cv2.COLOR_BGR2GRAY)


    # Detect faces
    faces = face_cascade.detectMultiScale(gray, scaleFactor=1.1, minNeighbors=5, minSize=(30, 30))


    # Draw rectangles (optional)
    for (x, y, w, h) in faces:
        cv2.rectangle(image, (x, y), (x + w, y + h), (0, 255, 0), 2)


    # Show result
    cv2.imshow("Detected Faces", image)
    cv2.waitKey(0)
    cv2.destroyAllWindows()
```

```
    return len(faces)


# === Correct usage below ===
image_path = r"C:\Users\harik\Downloads\CV LAB\people.jpeg"  # <-- YOUR INPUT GOES HERE
face_count = count_faces_in_image(image_path)
print(f"Number of faces detected: {face_count}")
```

OUTPUT: