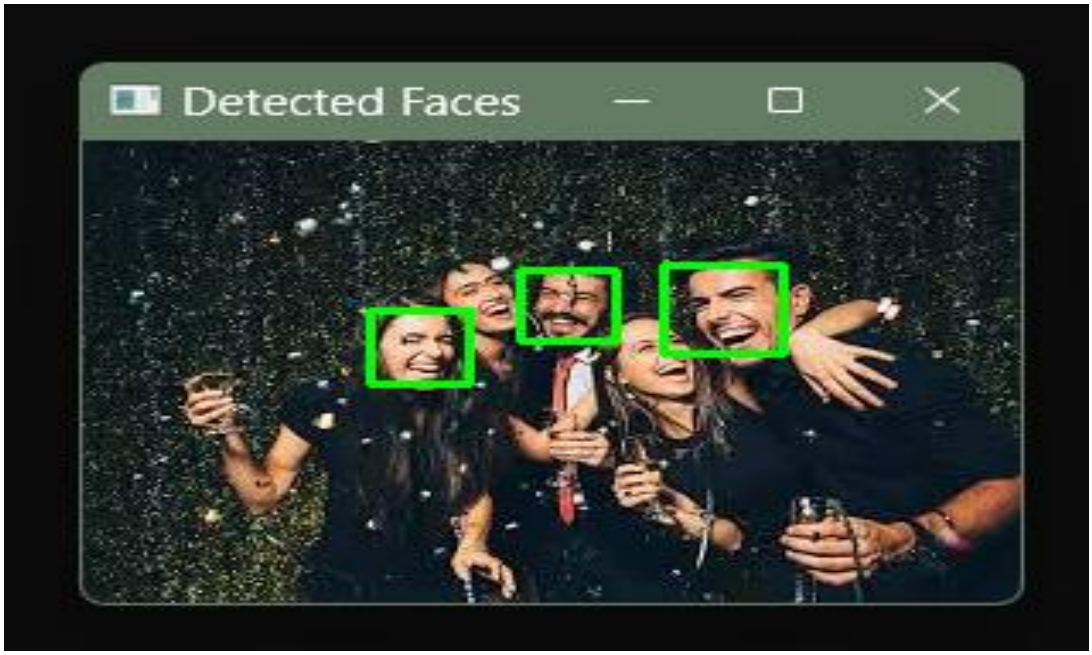
27. Implement a face detection algorithm using Open CV to detect and locate human faces in the images.

PROGRAM:

```
import cv2


def detect_faces(image_path):
    # Load Haar cascade for face detection
    face_cascade = cv2.CascadeClassifier(cv2.data.haarcascades + 
'haarcascade_frontalface_default.xml')


    # Read image
    image = cv2.imread(image_path)


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


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


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


    # Display result
    cv2.imshow('Detected Faces', image)
    cv2.waitKey(0)
    cv2.destroyAllWindows()


# Call the function with your image path
detect_faces(r"C:\Users\harik\Downloads\CV LAB\face.jpeg")
```


Detected Faces