

## 35.Face Detection using Opencv.

### PROGRAM:

```
EXP-35.py - C:/Users/reddy/OneDrive/Desktop/COMPUTER VISION/EXP-35.py (3.11.9)
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import cv2

# Step 1: Load Haar Cascade classifier
face_cascade = cv2.CascadeClassifier(
    cv2.data.haarcascades + "haarcascade_frontalface_default.xml"
)

# Step 2: Read image
img = cv2.imread(r"C:\Users\reddy\OneDrive\Desktop\COMPUTER VISION\FACE.png")

# Step 3: Convert to grayscale
gray = cv2.cvtColor(img, cv2.COLOR_BGR2GRAY)

# Step 4: Detect faces
faces = face_cascade.detectMultiScale(
    gray,
    scaleFactor=1.3,
    minNeighbors=5
)

# Step 5: Draw rectangle around faces
for (x, y, w, h) in faces:
    cv2.rectangle(img, (x, y), (x+w, y+h), (0,255,0), 2)

# Step 6: Show result
cv2.imshow("Face Detection", img)
cv2.waitKey(0)
cv2.destroyAllWindows()
```

### OUTPUT:

