EXPERIMENT 16 – BUILD A QR CODE SCANNER

Aim: To build a QR code scanner using opencv.

Algorithm:

1. Install Libraries: Install opencv-python and pyzbar libraries.
2. Initialize Camera: Set up the camera to capture images.
3. Capture Image: Capture a frame from the camera feed.
4. Convert to Grayscale: Convert the captured frame to grayscale.
5. Detect QR Code: Use pyzbar to detect QR codes in the grayscale image.
6. Decode QR Code: Decode the detected QR code to extract information.
7. Display Result: Display the decoded information and draw a bounding box around the QR code
8. Repeat: Continuously capture frames and process them until the user stops the program.

Code & output:

```
!pip install pyqrcode

!pip install pypng
!pip install IPython

import pyqrcode
import png
from pyqrcode import QRCode
from IPython.display import Image

s = "Mr Programmer github Link - https://github.com/dashboard"

url = pyqrcode.create(s)
url.png('myqr.png', scale=6)


Image(filename='myqr.png')
```