```python
import cv2
import numpy as np
import matplotlib.pyplot as plt
```

```python
def harris_edge_detection(image, block_size=2, ksize=3, k=0.04, threshold=0.01):
    # Convert the image to grayscale
    gray = cv2.cvtColor(image, cv2.COLOR_BGR2GRAY)

    # Apply Harris corner detection
    corners = cv2.cornerHarris(gray, block_size, ksize, k)

    # Dilate corners to mark them better
    corners = cv2.dilate(corners, None)

    # Threshold for an optimal value, it may vary depending on the image
    image[corners > threshold * corners.max()] = [0, 0, 255]  # Mark detected corne

    return image
```

```python
image = cv2.imread('..\image.jpg')
image = cv2.cvtColor(image, cv2.COLOR_BGR2RGB)
plt.imshow(image)
```

Out[ ]: <matplotlib.image.AxesImage at 0x2541dabb650>


```python
result = harris_edge_detection(image)
plt.imshow(result,cmap="gray")
```

Out[ ]: <matplotlib.image.AxesImage at 0x2541da0aad0>