USING FOR LOOP:

```
import numpy as np
import cv2 square_size=50
# Create a blank white img
img=np.ones((8*square_size,8*square_size,3))*255
for i in range(8):     for j in range(8):         if (i +
j)%2==1:
          img[i*square_size:(i + 1)*square_size,j*square_size:(j
+ 1)*square_size]=[0,0,0]#black squares at concurrent areas
cv2.imshow('Checker board Pattern',img) cv2.waitKey(0)
cv2.destroyAllWindows()
```

RINEX MINI PROJECT 1 ON PYHTON USING NUMPY AND OPENCV

OUTPUT:

checkerboard(1).py - C:/Users/SHYAM PRASATH/Pictures/Human rights/Rinex/checkerboard(1).py (3.11.4)

File Edit Format Run Options Window Help

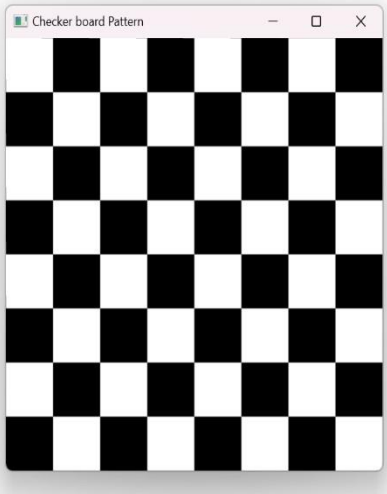
```
import numpy as np
import cv2
square_size=50
# Create a blank white img
img=np.ones((8*square_size,8*square_size,3))*255
for i in range(8):
    for j in range(8):
        if (i + j)%2==1:
            img[i*square_size:(i + 1)*square_size,j*square_size:(j + 1)*square_size]=[0,0,0]#black squares at concurrent areas
cv2.imshow('Checker board Pattern',img)
cv2.waitKey(0)
cv2.destroyAllWindows()
```

Ln: 13 Col: 0

checkerboard(1).py - C:/Users/SHYAM PRASATH/Pictures/Human rights/Rinex/checkerboard(1).py (3.11.4)

File Edit Format Run Options Window Help

```
import numpy as np
import cv2
square_size=50
# Create a blank white img
img=np.ones((8*square_size,8*square_size,3))*255
for i in range(8):
    for j in range(8):
        if (i + j)%2==1:
            img[i*square_size:(i + 1)*square_size,j*square_size:(j + 1)*square_size]=[0,0,0]#black squares at concurrent areas
cv2.imshow('Checker board Pattern',img)
cv2.waitKey(0)
cv2.destroyAllWindows()
```



Ln: 9 Col: 15

USING WHILE LOOP:

```
import numpy as np import
cv2
square_size=50 #rough idea of square area
# Create a blank white canvas
img=np.ones((8*square_size,8*square_size,3))*255
i=0 while i<8:
   j=0     while
j<8:        if
(i+j)%2==1:

img[i*square_size:(i+1)*square_size,j*square_size:(j+1)*squa
re_size]=[0,0,0]#black covering area        j=j+1     i=i+1
cv2.imshow('Chessboard Pattern(8 x 8)',img)
cv2.waitKey(0) cv2.destroyAllWindows()
```

RINEX MINI PROJECT 1 ON PYHTON USING NUMPY AND OPENCV

OUTPUT:

checkerboard(2).py - C:/Users/SHYAM PRASATH/Pictures/Human rights/Rinex/checkerboard(2).py (3.11.4)

File Edit Format Run Options Window Help

```
import numpy as np
import cv2
square_size=50 #rough idea of square area
# Create a blank white canvas
img=np.ones((8*square_size,8*square_size,3))*255
i=0
while i<8:
    j=0
    while j<8:
        if (i+j)%2==1:
            img[i*square_size:(i+1)*square_size,j*square_size:(j+1)*square_size]=[0,0,0]#black covering area
        j=j+1
    i=i+1
cv2.imshow('Chessboard Pattern(8 x 8)',img)
cv2.waitKey(0)
cv2.destroyAllWindows()
```

Ln: 7 Col: 10