

DETAILS:

Name: Gandhi Priyanka Goud

College: St. Peter's Engineering College

Branch: AI&DS (Artificial Intelligence and Data Science)

Year: 2 Year

1. Python code for 8x8 Checker board

```
import numpy as np
import cv2

img = np.ones((800,800,3))
#First column
img[0:100,100:200] = 0,0,0
img[0:100,300:400]= 0,0,0
img[0:100,500:600] = 0,0,0
img[0:100,700:800]=0,0,0
#Second column
img[100:200,0:100] = 0,0,0
img[100:200,400:500] = 0,0,0
img[100:200,600:700] = 0,0,0
img[100:200,200:300] = 0,0,0
#Third column
img[200:300,100:200]=0,0,0
img[200:300,300:400]=0,0,0
img[200:300,500:600]=0,0,0
img[200:300,700:800]=0,0,0
#Fourth column
img[300:400,0:100]=0,0,0
img[300:400,400:500]=0,0,0
img[300:400,600:700]=0,0,0
img[300:400,200:300]=0,0,0
#Fifth column
img[400:500,100:200]=0,0,0
img[400:500,300:400]=0,0,0
img[400:500,500:600]=0,0,0
img[400:500,700:800]=0,0,0
#Sixth column
img[500:600,0:100]=0,0,0
img[500:600,200:300]=0,0,0
img[500:600,400:500]=0,0,0
img[500:600,600:700]=0,0,0
```

#Seveth column

img[600:700,100:200]=0,0,0

img[600:700,300:400]=0,0,0

img[600:700,500:600]=0,0,0

img[600:700,700:800]=0,0,0

#Eighth column

img[700:800,0:100]=0,0,0

img[700:800,200:300]=0,0,0

img[700:800,400:500]=0,0,0

img[700:800,600:700]=0,0,0

#Scaling:

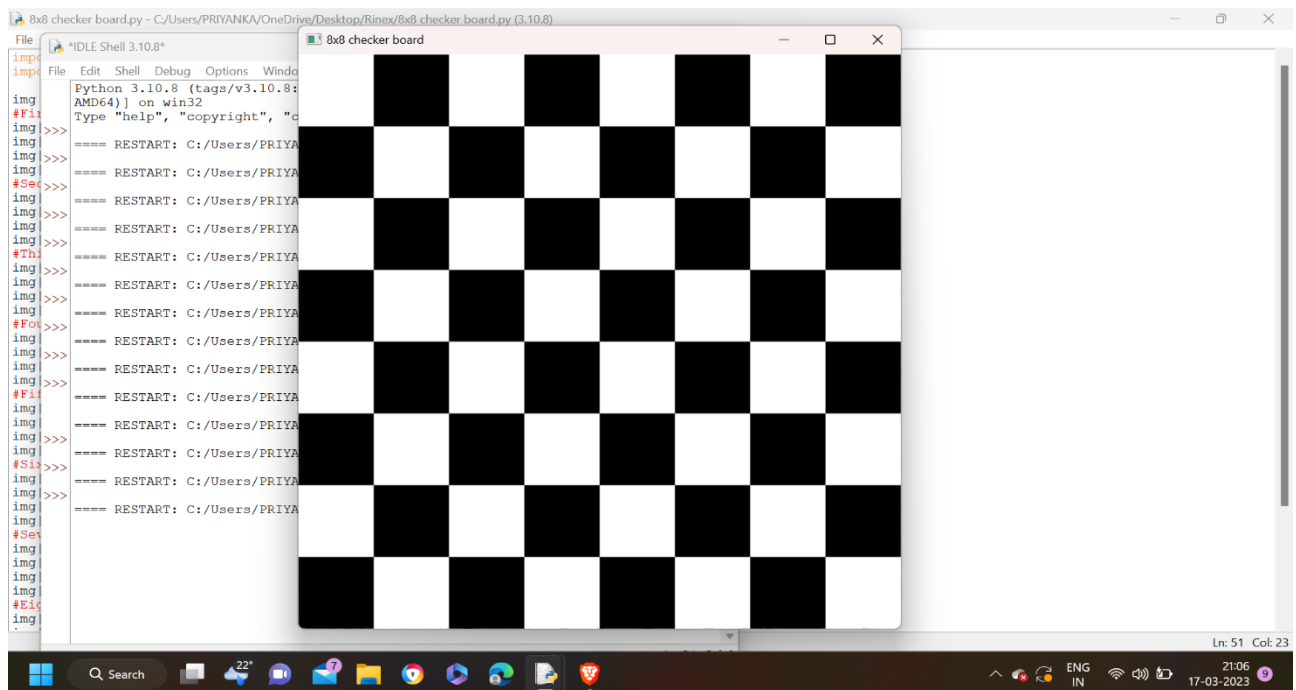
img1 = cv2.resize(img,None,fx = 0.75,fy = 0.75)

cv2.imshow('8x8 checker board',img1)

cv2.waitKey(0)

cv2.destroyAllWindows()

Output:



2. Python Code for 8x8 checker board using for loop

```
import cv2
import numpy as np

size = 8

img = np.ones((size, size), dtype=np.uint8)

for i in range(size):
    for j in range(size):
        if (i + j) % 2 == 0:
            img[i, j] = 255

img = cv2.resize(img, (400, 400), interpolation=cv2.INTER_NEAREST)
#interpolation gives the option of different methods of resizing the image
cv2.imshow('8x8 Checkerboard', img)
cv2.waitKey(0)
cv2.destroyAllWindows()
```

Output:

