INTRODUCTION

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BRANCH: COMPUTER ENGINEERING
YEAR: SECOND

Content-Mini_project_2_Report

Aim: Create an 8x8 checkerboard using NumPy and OpenCV
One can use loop (for, while) to get the answer.

Code:

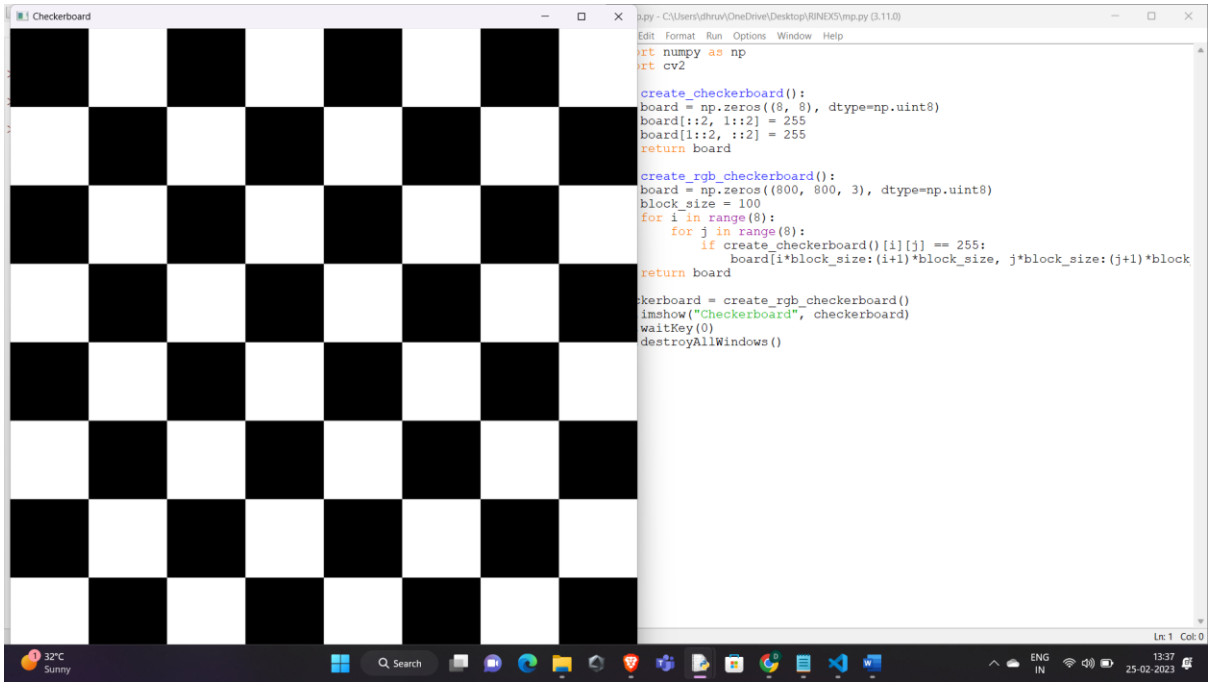
```
import numpy as np
import cv2

def create_checkerboard():
    board = np.zeros((8, 8), dtype=np.uint8)
    board[::2, 1::2] = 255
    board[1::2, ::2] = 255
    return board

def create_rgb_checkerboard():
    board = np.zeros((800, 800, 3), dtype=np.uint8)
    block_size = 100
    for i in range(8):
        for j in range(8):
            if create_checkerboard()[i][j] == 255:
                board[i*block_size:(i+1)*block_size, j*block_size:(j+1)*block_size,
:] = 255
    return board

checkerboard = create_rgb_checkerboard()
cv2.imshow("Checkerboard", checkerboard)
cv2.waitKey(0)
cv2.destroyAllWindows()
```

OUTPUT:


Checkerboard
Edit Format Run Options Window Help
rt numpy as np
rt cv2
create_checkerboard():
board = np.zeros((8, 8), dtype=np.uint8)
board[::2, 1::2] = 255
board[1::2, ::2] = 255
return board
create_rgb_checkerboard():
board = np.zeros((800, 800, 3), dtype=np.uint8)
block_size = 100
for i in range(8):
for j in range(8):
if create_checkerboard()[i][j] == 255:
board[i*block_size:(i+1)*block_size, j*block_size:(j+1)*block
return board
kerboard = create_rgb_checkerboard()
imshow("Checkerboard", checkerboard)
waitKey(0)
destroyAllWindows()
Ln: 1 Col: 0
32°C
Sunny
Search
ENG
IN
13:37
25-02-2023