```
In [ ]: import numpy as np
import cv2
import glob
import matplotlib.pyplot as plt

In [ ]: chess = cv2.imread('./image/chess.jpg' )
found , corner = cv2.findChessboardCorners(chess, (6,6))
cv2.drawChessboardCorners(chess ,(6,6) , corner , found)
```

```
Out[]: array([[[33, 29, 28],
                  [34, 30, 29],
                  [34, 30, 29],
                  . . . ,
                  [33, 28, 27],
                  [33, 28, 27],
                  [33, 28, 27]],
                 [[33, 29, 28],
                 [34, 30, 29],
                 [34, 30, 29],
                  . . . ,
                  [33, 28, 27],
                  [33, 28, 27],
                 [32, 27, 26]],
                 [[33, 29, 28],
                 [34, 30, 29],
                 [34, 30, 29],
                  . . . ,
                  [33, 28, 27],
                  [33, 28, 27],
                 [32, 27, 26]],
                 . . . ,
                 [[18, 16, 15],
                 [18, 16, 15],
                 [18, 16, 15],
                  . . . ,
                  [94, 86, 79],
                  [90, 82, 75],
                  [90, 80, 73]],
                 [[18, 16, 15],
                 [18, 16, 15],
                 [18, 16, 15],
                  . . . ,
                  [96, 88, 81],
                  [91, 83, 76],
                  [86, 76, 69]],
                 [[18, 16, 15],
                 [18, 16, 15],
                  [18, 16, 15],
                  . . . ,
                  [97, 89, 82],
                  [91, 83, 76],
                  [83, 73, 66]]], dtype=uint8)
In [ ]:
         import numpy as np
         import cv2 as cv
         import glob
         import matplotlib.pyplot as plt
```

```
criteria = (cv.TERM_CRITERIA_EPS + cv.TERM_CRITERIA_MAX_ITER, 30, 0.001)
objp = np.zeros((6*7, 3), np.float32)
objp[:, :2] = np.mgrid[0:7, 0:6].T.reshape(-1, 2)
objpoints = []
imgpoints = []
images = glob.glob('./image/chess.jpg')
for fname in images:
   img = cv.imread(fname)
   gray = cv.cvtColor(img, cv.COLOR_BGR2GRAY)
   ret, corners = cv.findChessboardCorners(gray, (6, 6), None)
   if ret == True:
        objpoints.append(objp)
        corners2 = cv.cornerSubPix(gray, corners, (11, 11), (-1, -1), criteria)
        imgpoints.append(corners2)
        cv.drawChessboardCorners(img, (7, 6), corners2, ret)
        cv.imshow('img', img)
        cv.waitKey(500)
cv.destroyAllWindows()
plt.imshow(img)
```

Out[ ]: <matplotlib.image.AxesImage at 0x25680b909d0>

