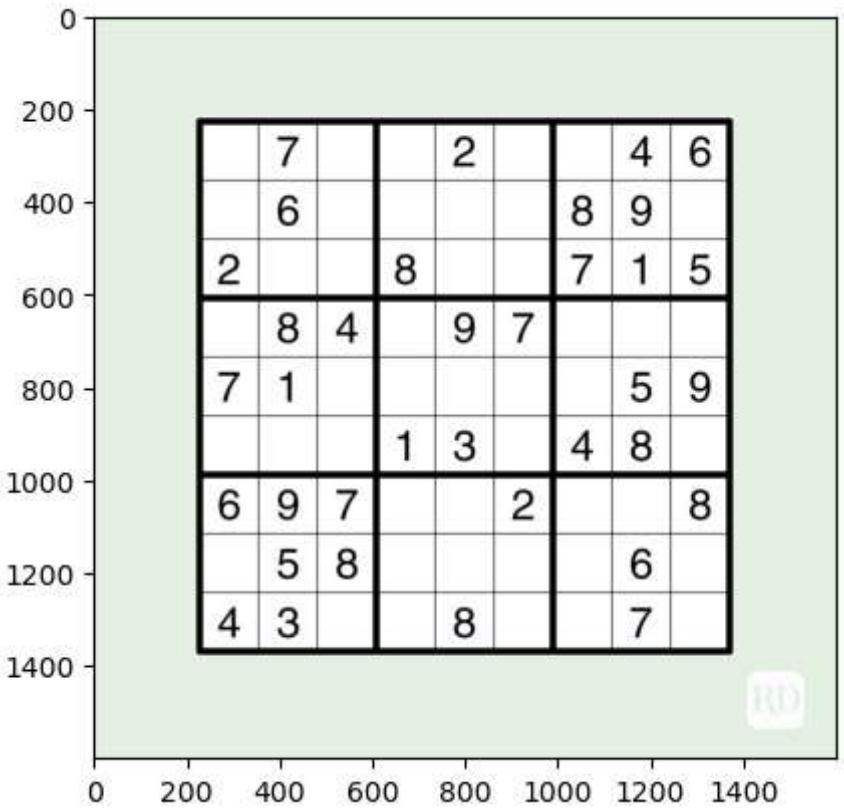
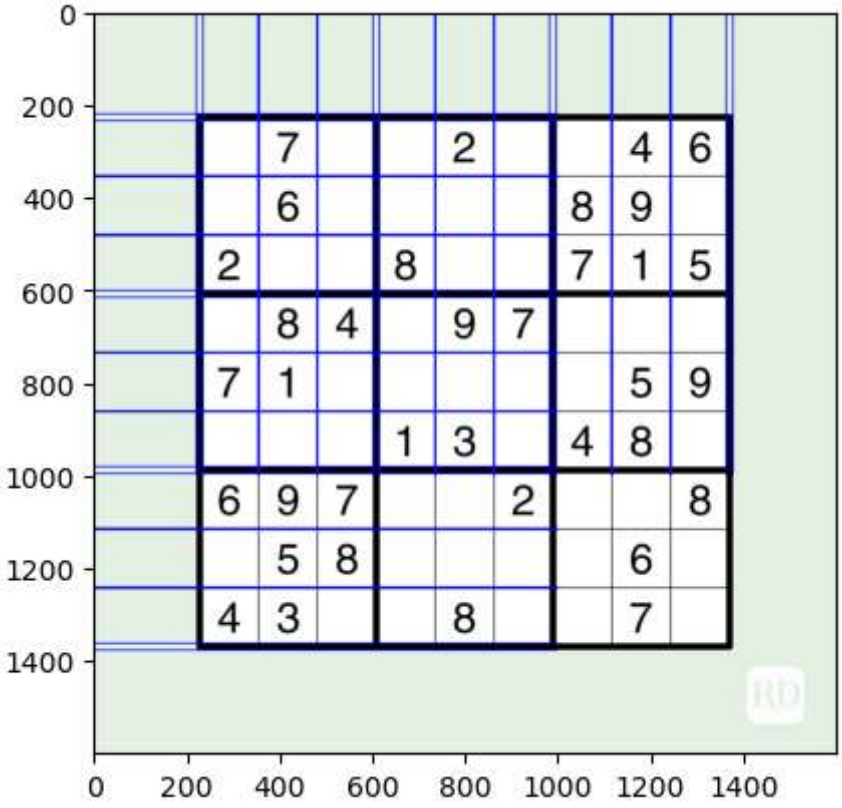
In [3]:
```
import cv2
import numpy as np
import matplotlib.pyplot as plt
```

In [4]:
```
img = cv2.imread('sudoku1.jpg')
gray = cv2.cvtColor(img,cv2.COLOR_BGR2GRAY)
plt.imshow(img)
```

Out[4]:
```
<matplotlib.image.AxesImage at 0x23201cabc40>
```



In [5]:
```
edges = cv2.Canny(gray,50,150,apertureSize = 3)
lines = cv2.HoughLines(edges,1,np.pi/180,200)
for line in lines:
    rho,theta = line[0]
    a = np.cos(theta)
    b = np.sin(theta)
    x0 = a*rho
    y0 = b*rho
    x1 = int(x0 + 1000*(-b))
    y1 = int(y0 + 1000*(a))
    x2 = int(x0 - 1000*(-b))
    y2 = int(y0 - 1000*(a))
    cv2.line(img,(x1,y1),(x2,y2),(0,0,255),2)
    plt.imshow(img)
```


0
200
400
600
800
1000
1200
1400
0 200 400 600 800 1000 1200 1400
7 2 4 6
6 8 9
2 8 7 1 5
8 4 9 7
7 1 5 9
1 3 4 8
6 9 7 2 8
5 8 6
4 3 8 7

In [ ]: