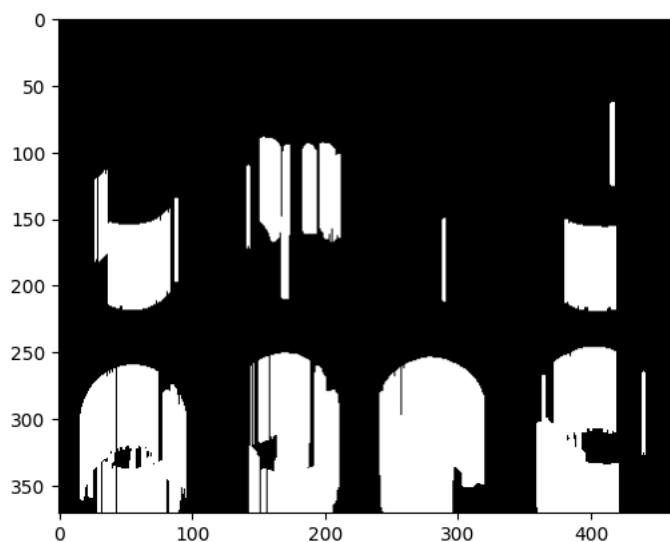
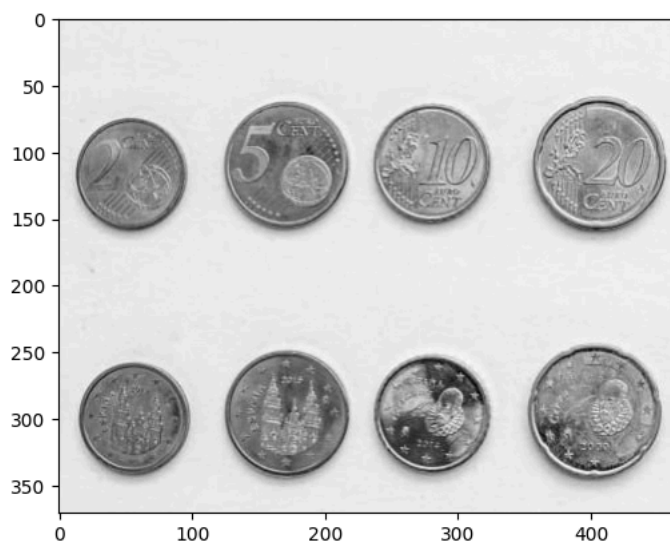


```
1 # HALİL ÖZBUDAK 2023688053
2 import cv2
3 import matplotlib.pyplot as plt
4 import numpy as np
5
6
7 para_bgr = cv2.imread("7.png")
8 para_bgr = cv2.cvtColor(para_bgr, cv2.COLOR_BGR2RGB)
9 plt.imshow(para_bgr)
10 plt.show()
11 para_gri = cv2.cvtColor(para_bgr, cv2.COLOR_RGB2GRAY)
12 plt.imshow(para_gri, cmap="gray")
13 plt.show()
14 bulanik_para = cv2.GaussianBlur(para_gri, (7,7), 0)
15 _, para_bin = cv2.threshold(bulanik_para, 130, 255, cv2.THRESH_BINARY)
16 kenar_para = cv2.Canny(para_bin, 100, 200)
17 kenar_para = cv2.dilate(kenar_para, (1,1), iterations=60)
18 plt.imshow(kenar_para, cmap="gray")
19 plt.show()
20 contours, hierarchy = cv2.findContours(kenar_para, cv2.RETR_EXTERNAL, cv2.CHAIN_APPROX_SIMPLE)
21
22 kontorlu_para = cv2.drawContours(para_bgr, contours, -1, (255,0,0), 4)
23
24 for i, kontor in enumerate(contours):
25     if cv2.contourArea(kontor) > 180:
26         x, y, w, h = cv2.boundingRect(kontor)
27         cv2.rectangle(kontorlu_para, (x,y), (x+w, y+h), (0,255,0), 4)
28         yazi_kutular = (x+w // 2 - 10, y+h // 2+5)
29         cv2.putText(kontorlu_para, str("H.0"), yazi_kutular, cv2.FONT_HERSHEY_SIMPLEX, 0.7, (0,0,255), 2)
30         cv2.putText(kontorlu_para, str(i), (x,y), cv2.FONT_HERSHEY_COMPLEX, 1, (0,0,255), 5)
31         print(cv2.contourArea(kontor))
32 plt.imshow(kontorlu_para)
33
```



2144.5  
321.5  
4588.5  
7714.0  
433.0  
5149.0  
5916.5