**Task4**

import cv2  
cap = cv2.VideoCapture(0)  
cap.set(cv2.CAP\_PROP\_FRAME\_WIDTH, 1280)  
cap.set(cv2.CAP\_PROP\_FRAME\_HEIGHT, 720)  
  
while True:  
 \_, frame = cap.read()  
 hsv\_frame = cv2.cvtColor(frame, cv2.COLOR\_BGR2HSV)  
 height, width, \_ = frame.shape  
  
 cx = int(width / 2)  
 cy = int(height / 2)  
  
 pixel\_center = hsv\_frame[cy, cx]  
 hue\_value = pixel\_center[0]  
  
 color = "Undefined"  
 if hue\_value < 5:  
 color = "RED"  
 elif hue\_value < 22:  
 color = "ORANGE"  
 elif hue\_value < 33:  
 color = "YELLOW"  
 elif hue\_value < 78:  
 color = "GREEN"  
 elif hue\_value < 131:  
 color = "BLUE"  
 elif hue\_value < 170:  
 color = "VIOLET"  
 else:  
 color = "RED"  
  
 pixel\_center\_bgr = frame[cy, cx]  
 b, g, r = int(pixel\_center\_bgr[0]), int(pixel\_center\_bgr[1]), int(pixel\_center\_bgr[2])  
  
 cv2.putText(frame, color, (10, 70), 0, 1.5, (b, g, r), 2)  
 cv2.circle(frame, (cx, cy), 5, (25, 25, 25), 3)  
  
 cv2.imshow("Frame", frame)  
 key = cv2.waitKey(1)  
 if key == 27:  
 break  
  
cap.release()  
cv2.destroyAllWindows()