import cv2

import numpy as np

image = cv2.imread('image.jpg')

rgb\_image = cv2.cvtColor(image, cv2.COLOR\_BGR2RGB)

gray\_image = cv2.cvtColor(rgb\_image, cv2.COLOR\_RGB2GRAY)

hsv\_image = cv2.cvtColor(rgb\_image, cv2.COLOR\_RGB2HSV)

rgb\_from\_hsv = cv2.cvtColor(hsv\_image, cv2.COLOR\_HSV2RGB)

rgb\_from\_gray = cv2.cvtColor(gray\_image, cv2.COLOR\_GRAY2RGB)

bgr\_image = cv2.cvtColor(rgb\_image, cv2.COLOR\_RGB2BGR)

rgb\_from\_bgr = cv2.cvtColor(bgr\_image, cv2.COLOR\_BGR2RGB)

gray\_from\_bgr = cv2.cvtColor(bgr\_image, cv2.COLOR\_BGR2GRAY)

bgr\_from\_hsv = cv2.cvtColor(hsv\_image, cv2.COLOR\_HSV2BGR)

hsv\_from\_bgr = cv2.cvtColor(bgr\_image, cv2.COLOR\_BGR2HSV)

cv2.imshow('Original Image', image)

cv2.imshow('RGB Image', rgb\_image)

cv2.imshow('Grayscale Image', gray\_image)

cv2.imshow('HSV Image', hsv\_image)

cv2.imshow('RGB from HSV', rgb\_from\_hsv)

cv2.imshow('RGB from Grayscale', rgb\_from\_gray)

cv2.imshow('BGR Image', bgr\_image)

cv2.imshow('RGB from BGR', rgb\_from\_bgr)

cv2.imshow('Grayscale from BGR', gray\_from\_bgr)

cv2.imshow('BGR from HSV', bgr\_from\_hsv)

cv2.imshow('HSV from BGR', hsv\_from\_bgr)

cv2.waitKey(0)

cv2.destroyAllWindows()