

## READING IMAGES

```
import cv2
img = cv2.imread('name',1)
img2 = cv2.imread('name',0)
cv2.imshow('Pic',img)
k=cv2.waitKey(0)
if k == ord('s'):
    cv2.imshow('Pic2',img2)
    cv2.waitKey(0)
    cv2.destroyAllWindows()
cv2.waitKey(0)
cv2.destroyAllWindows()
```

## DRAWING SHAPES ON IMAGES

```
import cv2
img = cv2.imread('name',1)
img = cv2.line(img,(150,123),(200,300),(0,0,0),5)

#img = cv2.arrowsline(img,(150,123),(200,300),(0,0,255),5)
#img = cv2.rectangle(img,(150,123),(200,300),(225,0,255),-1)
#img = cv2.circle(img,(150,123),58,(225,0,0),-1)
#img = cv2.putText(img,'OpenCV is fun!',
(23,150),cv2.FONT_ITALIC,3,(0,0,0),5,cv2.LINE_4)

cv2.imshow('Pic',img)
cv2.waitKey(0)
cv2.destroyAllWindows()
```

## EXTRACTING RGB VALUES

```
import cv2
img = cv2.imread('name',1)
(B,G,R)=img[230:400]
print("R={},G={},B={}".format(R,G,B))
roi=img[90:390,300:600]
cv2.imshow('Pic',roi)
cv2.waitKey(0)
cv2.destroyAllWindows()
```

## CAPTURING VIDEO

```
import cv2
vid=cv2.VideoCapture(0)
while(True):
    state,frame=vid.read()
    gray=cv2.cvtColor(frame,cv2.COLOR_BGR2GRAY)
    cv2.imshow('Hey',gray)
    if cv2.waitKey(1)==ord('e'):
        break
vid.release()
cv2.destroyAllWindows()
```

## PLAYING VIDEO ON LOOP

```
import cv2
vid=cv2.VideoCapture('Location')
counter=0
while(True):
    state,frame=vid.read()
    counter+=1
    if counter==vid.get(cv2.CAP_PROP_FRAME_COUNT):
        counter=0
        vid.set(cv2.CAP_PROP_POS_FRAMES, 0)

    cv2.imshow('Video',frame)
    if cv2.waitKey(1)==ord('e'):
        break
vid.release()
cv2.destroyAllWindows()
```