```
import  cv2  as  cv
import  numpy  as  np
```

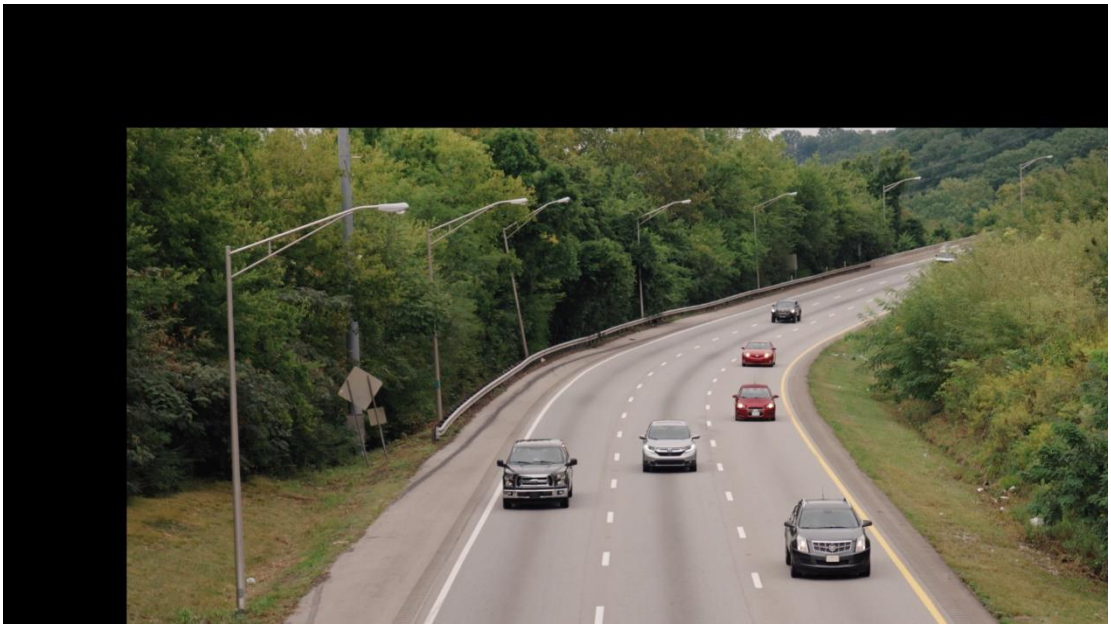
```
img  =  cv.imread("image.png")
```

- Translation(平移)

```
#translation

h,  w,  c  =  img.shape
T  =  np.float32([[1,0,200],
                  [0,1,200]])
trans  =  cv.warpAffine(img,  T,  (w,h))

cv.imwrite("translated.png",  trans)
```



- rotation (旋轉)

```
#rotation
h,  w,  c  =  img.shape
R  =  cv.getRotationMatrix2D((w/2,h/2),  135,  1)

rota  =  cv.warpAffine(img,  R,  (w,h))
cv.imwrite("rotation.png",  rota)
```

(旋轉 135 度)

- flipping(垂直翻轉)

```
#flipped
flip  =  cv.flip(img,  0)
cv.imwrite("flip.png",  flip)
```

- scaling (縮放)

```
#scaling
h,  w,  c  =  img.shape
resize  =  cv.resize(img,(int(0.3*w),  int(0.3*h)),  interpolation  =  cv.INTER_NEAREST)

cv.imwrite("scaling.png",  resize)
```

(縮 0.3 倍)

- cropping(裁切)

```
#cropping
#print(img.shape)
crop  =  img[200:900,  200:900]
cv.imwrite("cropped.png",  crop)
```