

```
import numpy as np
import cv2
from google.colab.patches import cv2_imshow

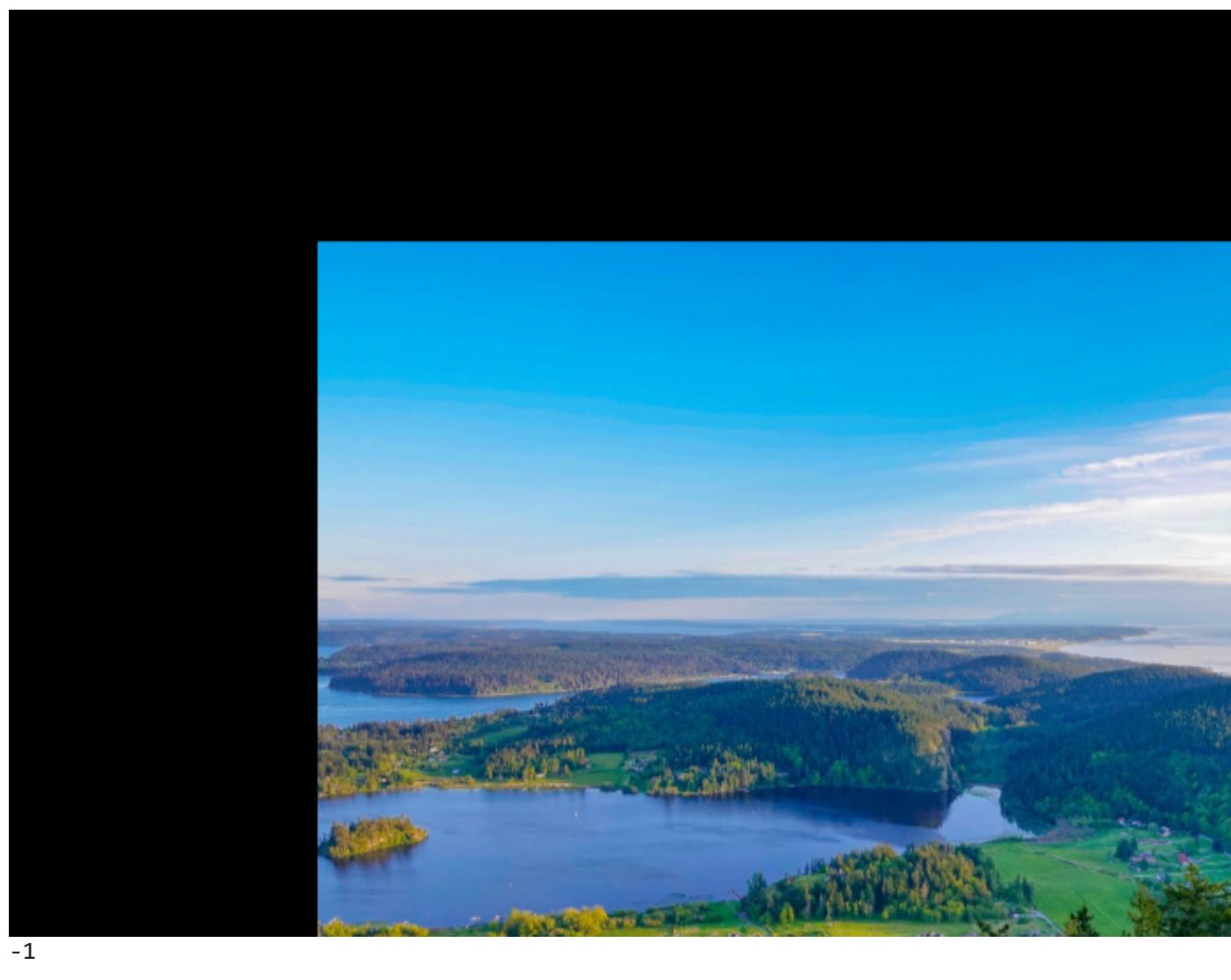
image = cv2.imread("/content/image.jpg")
img = cv2.resize(image,(0,0),fx = 0.5,fy = 0.5 )
cv2_imshow(img);
```



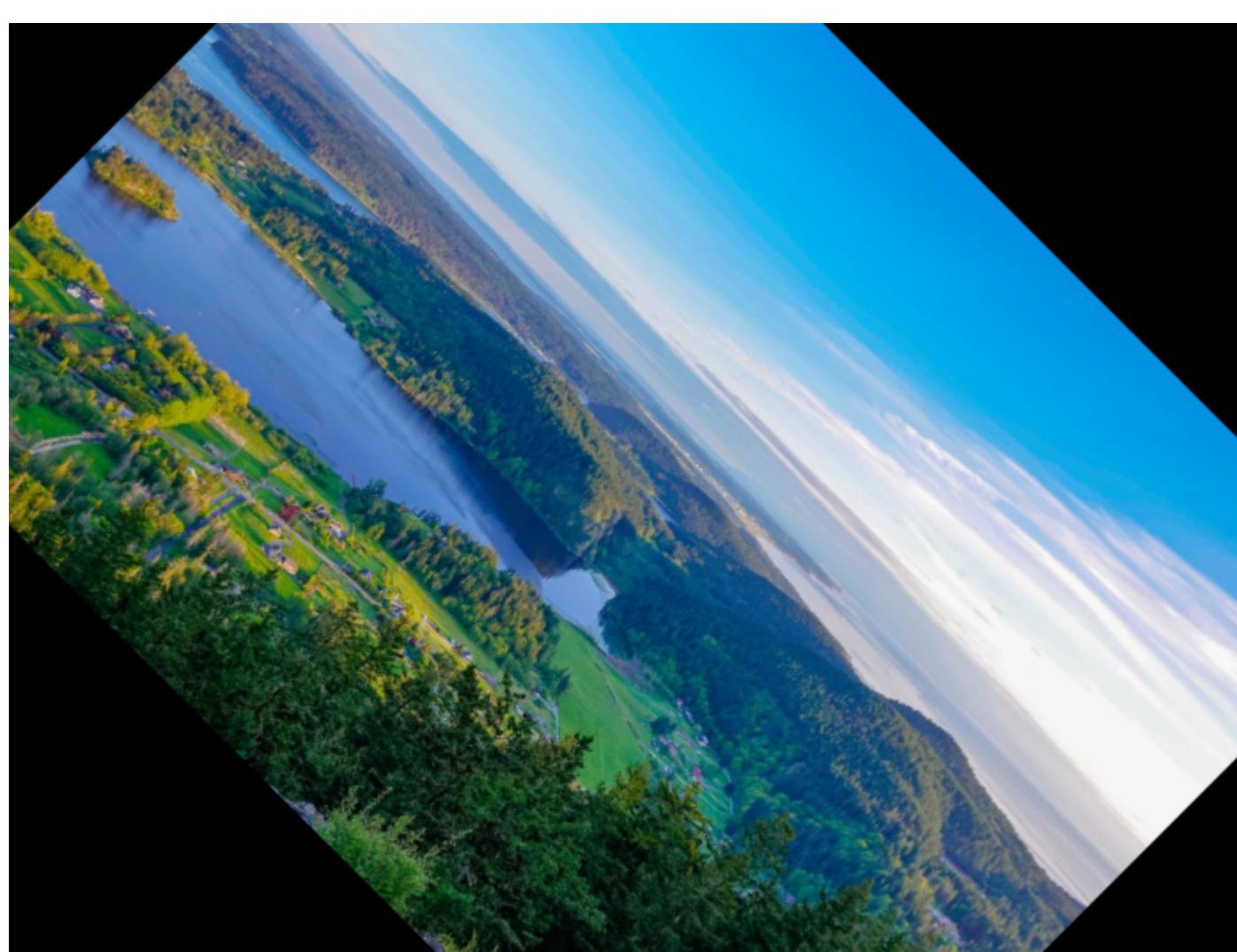
```
height, width = img.shape[:2]
quarter_height, quarter_width = height / 4, width / 4
T = np.float32([[1, 0, quarter_width], [0, 1, quarter_height]])

# We use warpAffine to transform
# the image using the matrix, T
img_translation = cv2.warpAffine(img, T, (width, height))

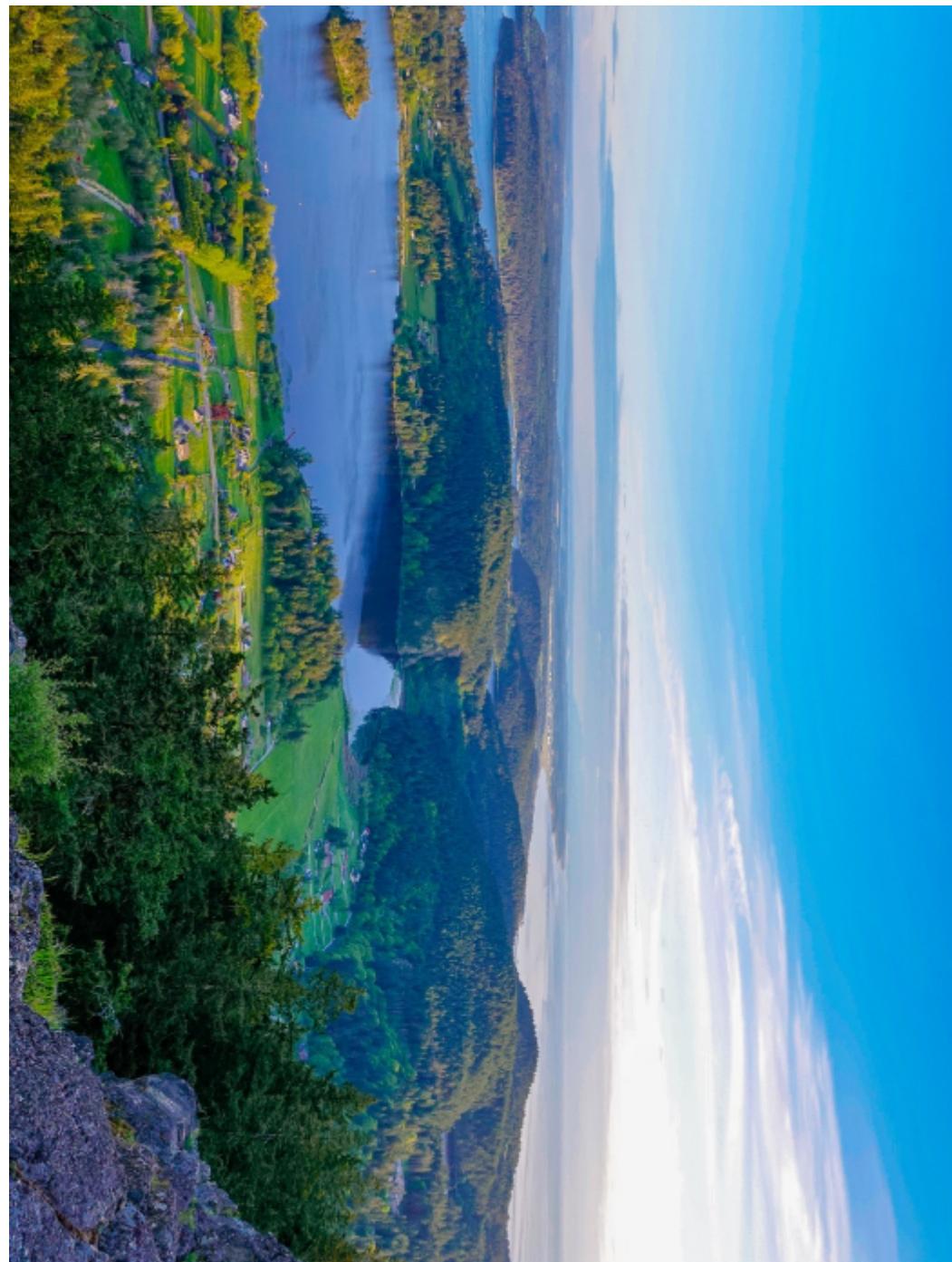
cv2_imshow(img_translation)
cv2.waitKey()
```



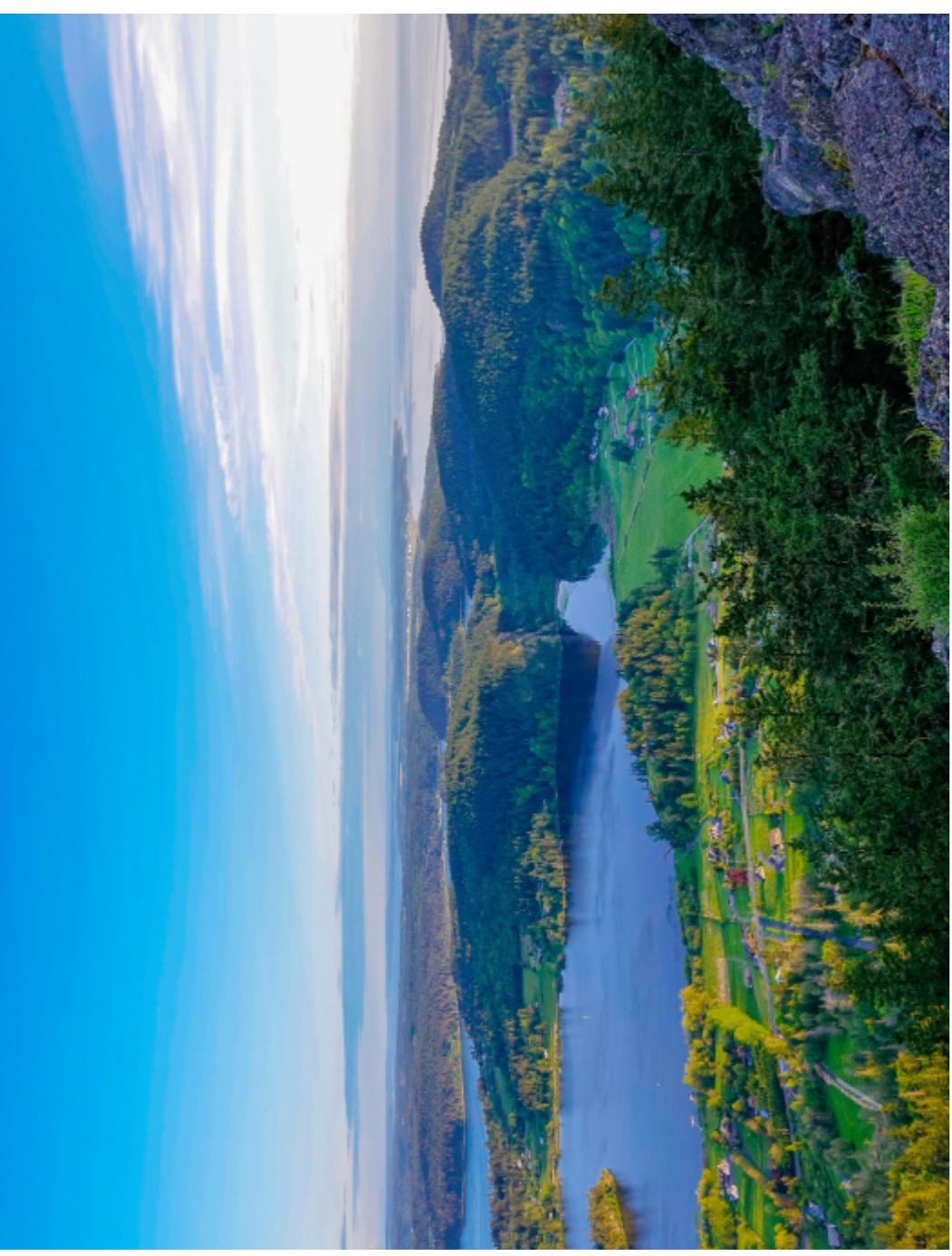
```
centre = (img.shape[1]//2,img.shape[0]//2)
M = cv2.getRotationMatrix2D(centre,-45,1 )
img_rotated = cv2.warpAffine(img, M, (width, height))
cv2_imshow(img_rotated)
```



```
rotated = cv2.rotate(img, cv2.ROTATE_90_CLOCKWISE)
cv2_imshow(rotated)
```



```
rotated = cv2.rotate(img, cv2.ROTATE_90_COUNTERCLOCKWISE)
cv2_imshow(rotated)
```



```
rotated = cv2.rotate(img, cv2.ROTATE_180)
cv2_imshow(rotated)
```



```
img_resize = cv2.resize(img,(0,0),fx = 0.5,fy = 0.5 )
cv2_imshow(img_resize)
```



```
cropped_image = img[0:400, 0:300]
cv2_imshow(cropped_image)
```

