```python
import cv2

img = cv2.imread('test.jpg')
cv2.imshow('Original', img)
cv2.waitKey(0)

img_gray = cv2.cvtColor(img,
cv2.COLOR_BGR2GRAY)
img_blur = cv2.GaussianBlur(img_gray,
(3,3), 0)

# Sobel Edge Detection
sobelx = cv2.Sobel(src=img_blur,
ddepth=cv2.CV_64F, dx=1, dy=0, ksize=5)
sobely = cv2.Sobel(src=img_blur,
ddepth=cv2.CV_64F, dx=0, dy=1, ksize=5)
sobelxy = cv2.Sobel(src=img_blur,
ddepth=cv2.CV_64F, dx=1, dy=1, ksize=5)

cv2.imshow('Sobel X', sobelx)
cv2.waitKey(0)
cv2.imshow('Sobel Y', sobely)
cv2.waitKey(0)
cv2.imshow('Sobel X Y using Sobel()
function', sobelxy)
cv2.waitKey(0)

# Canny Edge Detection
edges = cv2.Canny(image=img_blur,
threshold1=100, threshold2=200)

cv2.imshow('Canny Edge Detection', edges)
cv2.waitKey(0)

cv2.destroyAllWindows()
```