(10) Fill in the missing comments for each OpenCV function in the Sobel pipeline, explaining the purpose of each step. The (10 pts - 1 pt each)

Comment = #

```
#
#
img = cv2.imread('Graphics/face_conv.png')


#
#
gray = cv2.cvtColor(img, cv2.COLOR_BGR2GRAY)


#
#
kernelOne = np.array([[1, 2, 1], [2, 4, 2], [1, 2, 1]],dtype=np.float32) / 16


#
#
filterOneImage = cv2.filter2D(KernelOne, cv2.CV_64F, gray)


#
#
kernelX = np.array([[-1, 0, 1], [-2, 0, 2], [-1, 0, 1]], dtype=np.float64)


#
#
KernelY = np.array([[-1, -2, -1], [0, 0, 0], [1, 2, 1]], dtype=np.float64)


#
#
imageX = cv2.filter2D(filterOneImage, cv2.CV_64F, kernelX)

#
#
imageY = cv2.filter2D(filterOneImage, cv2.CV_64F, kernelY)


# Compute the magnitude of the gradients of imageX and imageY
mag = cv2.magnitude(imageX, imageY)


#
#
val, thresh = cv2.threshold(mag, 100, 200, cv2.THRESH_BINARY)

#
#
plt.imshow(thresh, cmap='gray')
```