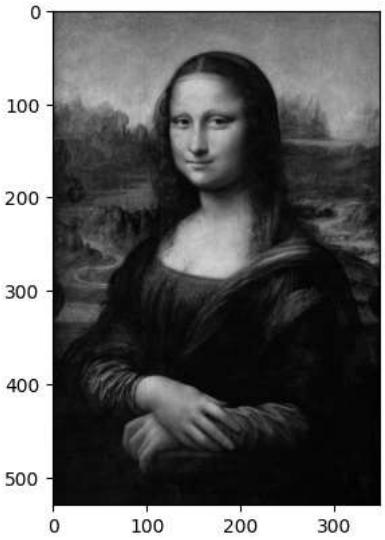
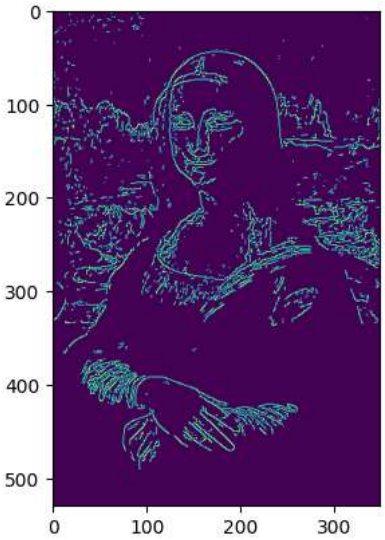
```
import cv2
import numpy as np
import matplotlib.pyplot as plt
%matplotlib inline


image=cv2.imread('/content/grayscaleimg.jpg')
plt.imshow(image)
```

```
<matplotlib.image.AxesImage at 0x7ebce84ebee0>
```




```
# threshold 1 below the threshold value do not consider it as edges
# threshold 2 above the threshold value do consider it as edges

# threshold 1 : this is the lower threshold for edge detection.
# this is used to identify weak edges in the image.
# Pixels with the gradient values below this threshold are not considered edges and are suppressed

# threshold2 : this is the higher threshold for edge detection.
# this is used to identify strongs edges in the image.
# Pixels with the gradient values above this threshold are stromg edges.

edges = cv2.Canny(image=image,threshold1=100,threshold2=120)
plt.imshow(edges)
```

```
<matplotlib.image.AxesImage at 0x7ebce82e9210>
```




```
# calculate the median pixel value
med_val=np.median(image)
med_val
```

```
36.0
```

```
lower=0.30*med_val
lower
```

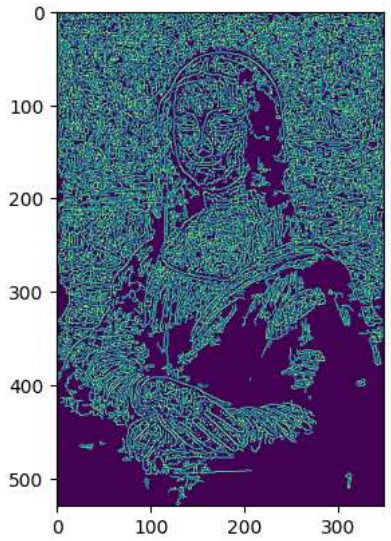
```
10.799999999999999
```

```
upper=1.20*med_val
upper
```

```
43.199999999999996
```

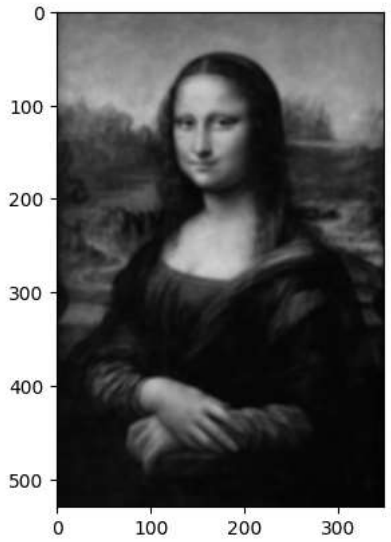
```
edges = cv2.Canny(image=image,threshold1=lower,threshold2=upper)
plt.imshow(edges)

# edges = cv2.Canny(image=image,lower,upper)
```

```
<matplotlib.image.AxesImage at 0x7ebce3f19ff0>
```




```
blurred_img=cv2.blur(image,ksize=(5,5))
plt.imshow(blurred_img)
```

```
<matplotlib.image.AxesImage at 0x7ebce8745d50>
```




```
edges = cv2.Canny(image=blurred_img,threshold1=lower,threshold2=upper)
plt.imshow(edges)
```

```
<matplotlib.image.AxesImage at 0x7ebce93b7cd0>
```