

Negative & Logarithmic Transformation Images

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Import Modules

```
In [1]: import cv2
import matplotlib.pyplot as plt
```

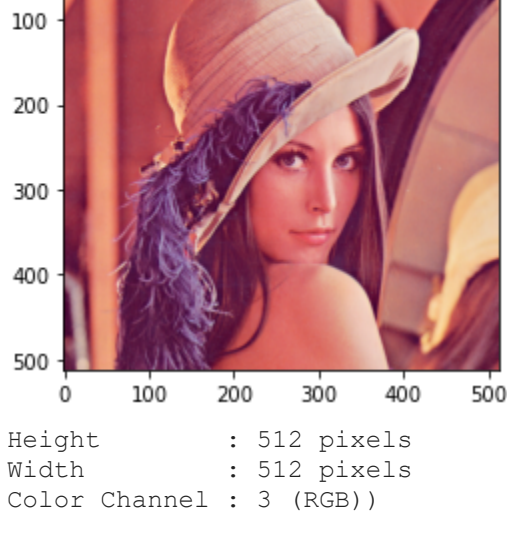
Display all original image

- Lenna Image

```
In [2]: img_lenna = cv2.cvtColor(cv2.imread('../images/lenna.png'), cv2.COLOR_BGR2RGB)

plt.imshow(img_lenna)
plt.title('Lenna')
plt.show()

print(f'Height      : {img_lenna.shape[0]} pixels')
print(f'Width       : {img_lenna.shape[1]} pixels')
print(f'Color Channel : {img_lenna.shape[2]} (RGB)')
```



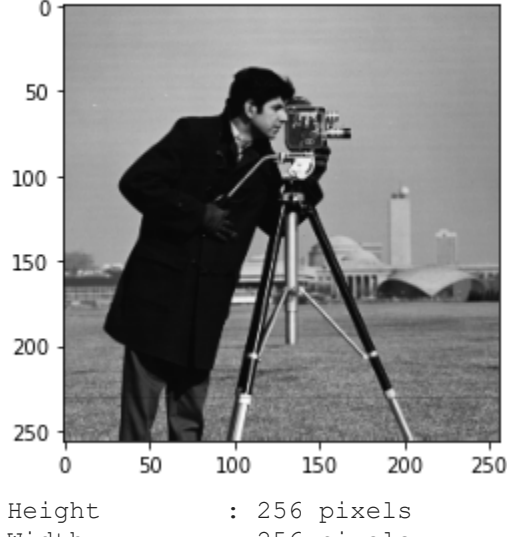
Height : 512 pixels
Width : 512 pixels
Color Channel : 3 (RGB)

- Cameraman Image

```
In [3]: img_cameraman = cv2.cvtColor(cv2.imread('../images/cameraman.png'), cv2.COLOR_BGR2RGB)

plt.imshow(img_cameraman)
plt.title('Cameraman')
plt.show()

print(f'Height      : {img_cameraman.shape[0]} pixels')
print(f'Width       : {img_cameraman.shape[1]} pixels')
print(f'Color Channel : {img_cameraman.shape[2]} (RGB)')
```



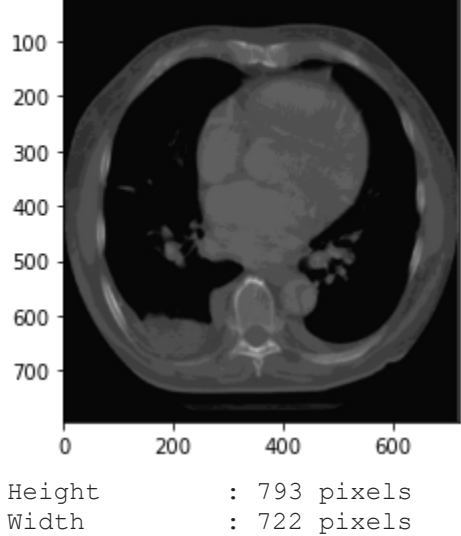
Height : 256 pixels
Width : 256 pixels
Color Channel : 3 (RGB)

- Lung Image

```
In [4]: img_lung = cv2.cvtColor(cv2.imread('../images/lung.png'), cv2.COLOR_BGR2RGB)

plt.imshow(img_lung)
plt.title('Cameraman')
plt.show()

print(f'Height      : {img_lung.shape[0]} pixels')
print(f'Width       : {img_lung.shape[1]} pixels')
print(f'Color Channel : {img_lung.shape[2]} (RGB)')
```



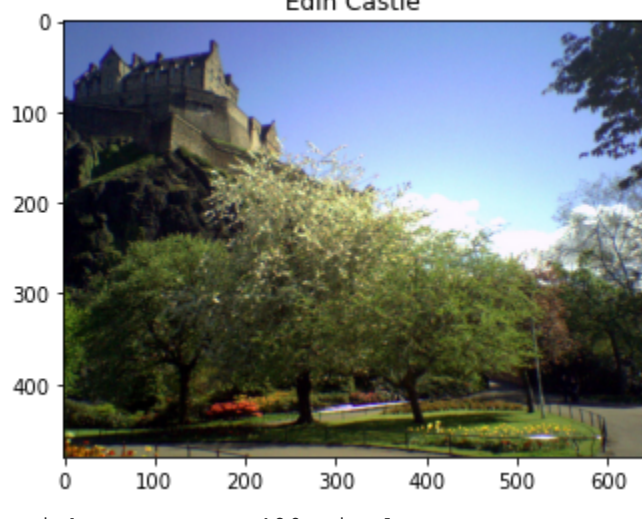
Height : 793 pixels
Width : 722 pixels
Color Channel : 3 (RGB)

- Edin Castle Image

```
In [5]: img_edin_castle = cv2.cvtColor(cv2.imread('../images/edin_castle.png'), cv2.COLOR_BGR2RGB)

plt.imshow(img_edin_castle)
plt.title('Edin Castle')
plt.show()

print(f'Height      : {img_edin_castle.shape[0]} pixels')
print(f'Width       : {img_edin_castle.shape[1]} pixels')
print(f'Color Channel : {img_edin_castle.shape[2]} (RGB)')
```



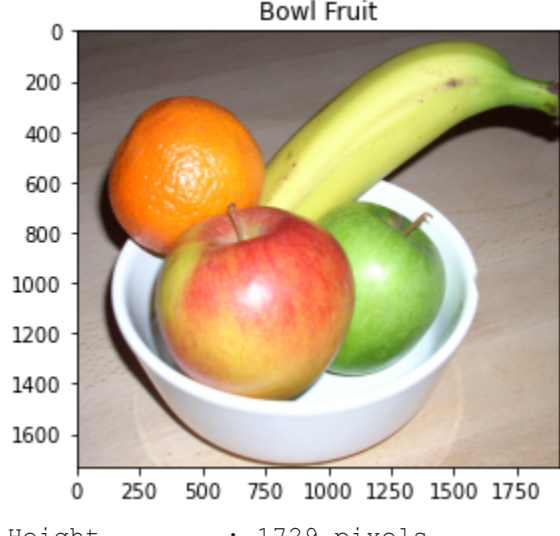
Height : 480 pixels
Width : 640 pixels
Color Channel : 3 (RGB)

- Bowl Fruit Image

```
In [6]: img_bowl_fruit = cv2.cvtColor(cv2.imread('../images/bowl_fruit.png'), cv2.COLOR_BGR2RGB)

plt.imshow(img_bowl_fruit)
plt.title('Bowl Fruit')
plt.show()

print(f'Height      : {img_bowl_fruit.shape[0]} pixels')
print(f'Width       : {img_bowl_fruit.shape[1]} pixels')
print(f'Color Channel : {img_bowl_fruit.shape[2]} (RGB)')
```



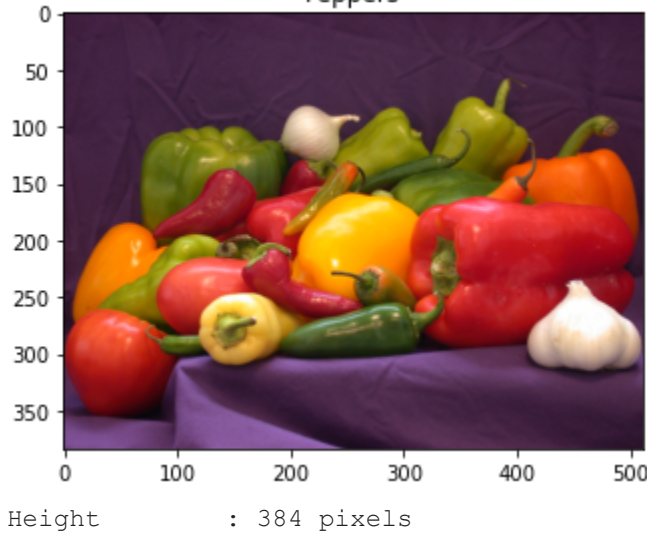
Height : 1729 pixels
Width : 1921 pixels
Color Channel : 3 (RGB)

- Peppers Image

```
In [7]: img_peppers = cv2.cvtColor(cv2.imread('../images/peppers.png'), cv2.COLOR_BGR2RGB)

plt.imshow(img_peppers)
plt.title('Peppers')
plt.show()

print(f'Height      : {img_peppers.shape[0]} pixels')
print(f'Width       : {img_peppers.shape[1]} pixels')
print(f'Color Channel : {img_peppers.shape[2]} (RGB)')
```



Height : 384 pixels
Width : 512 pixels
Color Channel : 3 (RGB)

- Map Spain Image

```
In [8]: img_map_spain = cv2.cvtColor(cv2.imread(
    '../images/map_of_spain.png'), cv2.COLOR_BGR2RGB)

plt.imshow(img_map_spain)
plt.title('Map Spain')
plt.show()

print(f'Height      : {img_map_spain.shape[0]} pixels')
print(f'Width       : {img_map_spain.shape[1]} pixels')
print(f'Color Channel : {img_map_spain.shape[2]} (RGB)')
```



Height : 375 pixels
Width : 487 pixels
Color Channel : 3 (RGB)