

DIP 2nd Practical Thresholding

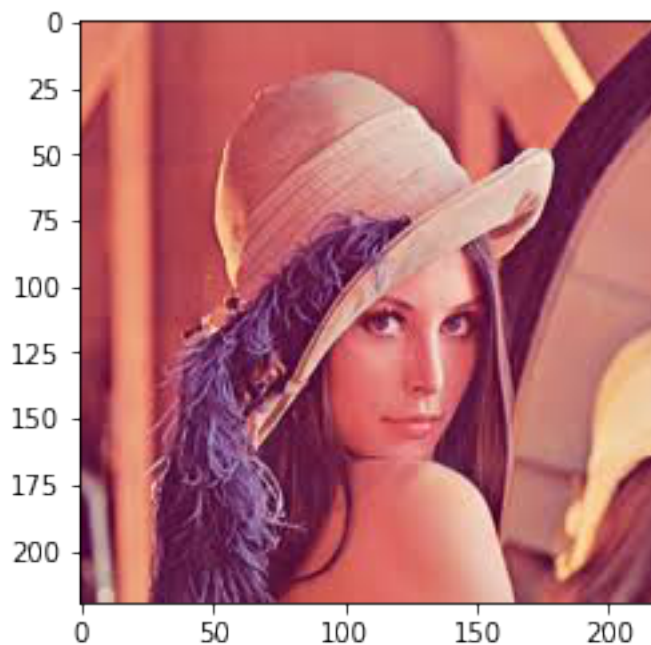
January 14, 2020

```
[1]: import matplotlib.image as img  
import matplotlib.pyplot as plt  
import numpy as np
```

```
[2]: image=img.imread("/home/wilcy/Downloads/lenna.jpg")
```

```
[3]: plt.imshow(image)
```

```
[3]: <matplotlib.image.AxesImage at 0x7f71493a8250>
```



```
[4]: print(image.shape)
```

```
(220, 220, 3)
```

```
[5]: i=np.zeros([220,220,3])  
print(i)
```

```

[[[0. 0. 0.]
  [0. 0. 0.]
  [0. 0. 0.]
  ...
  [0. 0. 0.]
  [0. 0. 0.]
  [0. 0. 0.]]]

```

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[[[0. 0. 0.]
  [0. 0. 0.]
  [0. 0. 0.]
  ...
  [0. 0. 0.]
  [0. 0. 0.]
  [0. 0. 0.]]]

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[[[0. 0. 0.]
  [0. 0. 0.]
  [0. 0. 0.]
  ...
  [0. 0. 0.]
  [0. 0. 0.]
  [0. 0. 0.]]]

```

...

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[[[0. 0. 0.]
  [0. 0. 0.]
  [0. 0. 0.]
  ...
  [0. 0. 0.]
  [0. 0. 0.]
  [0. 0. 0.]]]

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[[[0. 0. 0.]
  [0. 0. 0.]
  [0. 0. 0.]
  ...
  [0. 0. 0.]
  [0. 0. 0.]
  [0. 0. 0.]]]

```

```

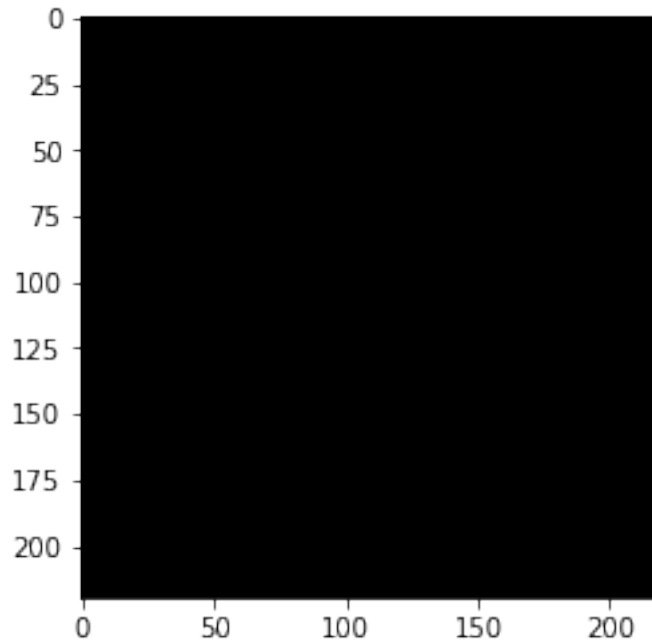
[[[0. 0. 0.]
  [0. 0. 0.]
  [0. 0. 0.]
  ...
  [0. 0. 0.]
  [0. 0. 0.]
  [0. 0. 0.]

```

```
[0. 0. 0.]]]
```

```
[6]: plt.imshow(i)
```

```
[6]: <matplotlib.image.AxesImage at 0x7f71482e9210>
```



```
[7]: def threshold(image):  
    for row in range(image.shape[0]):  
        for col in range(image.shape[1]):  
            if (image[row,col,0])>200:  
                red=1  
            else:  
                red=0  
            if (image[row,col,1])>200:  
                green=1  
            else:  
                green=0  
            if (image[row,col,2])>200:  
                blue=1  
            else:  
                blue=0  
            i[row,col]=[red,green,blue]  
    return i
```

```
[8]: plt.imshow(threshold(image))
```

```
[8]: <matplotlib.image.AxesImage at 0x7f7148255d90>
```

