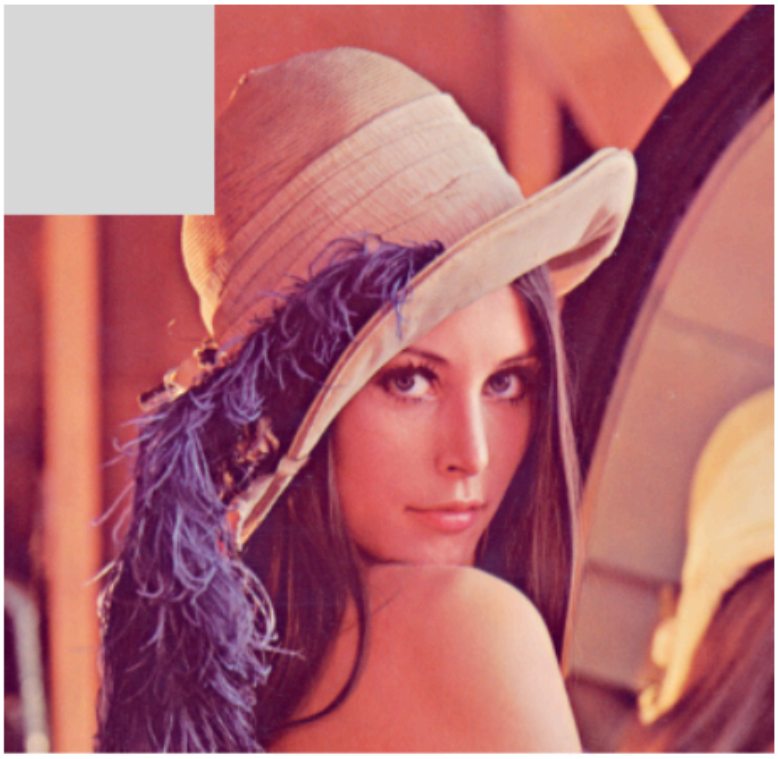
Display only the top left corner of 100x100 pixels

```
[14] top_left_corner = image_colored.crop((0, 0, 100, 100))
     display(top_left_corner)
```

Modify the top 100 × 100 pixels to a value of 210 and display the resulting image

```
image_modified = np.array(image_colored)
image_modified[:100, :100] = 210  # Setting pixel values to 210
image_modified_pil = Image.fromarray(image_modified)
display(image_modified_pil)
```



Grey Scale Image

```
image_grayed=image_colored.convert('L') #luminance change garni
display(image_grayed)
```

Extract and display the middle section of the image (150 pixels)

```
[19] mid_x, mid_y = width // 2, height // 2
     cropped_mid_section = image_grayed.crop((mid_x - 75, mid_y - 75, mid_x + 75, mid_y + 75))
     display(cropped_mid_section)
```

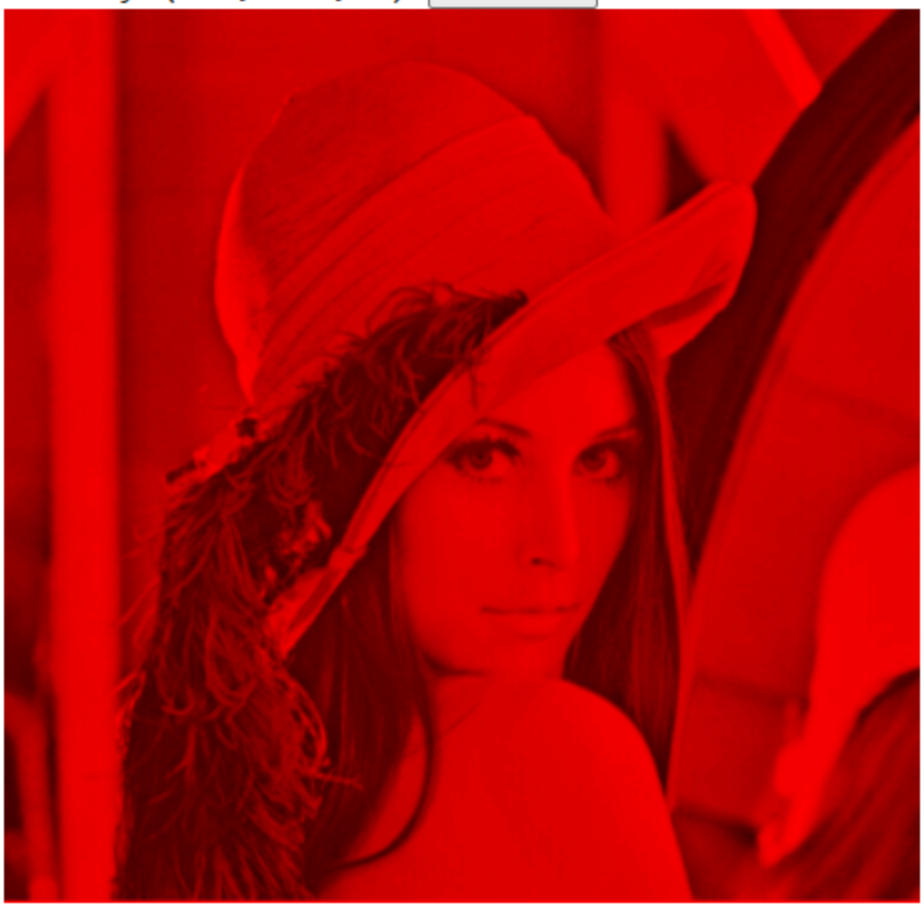
Apply a simple threshold to the image

```
[25] threshold_value = 100
     binary_image = image_array_grayed.copy()
     binary_image[binary_image < threshold_value] = 0
     binary_image[binary_image >= threshold_value] = 255
     binary_image_pil = Image.fromarray(binary_image)
     display(binary_image_pil)
```

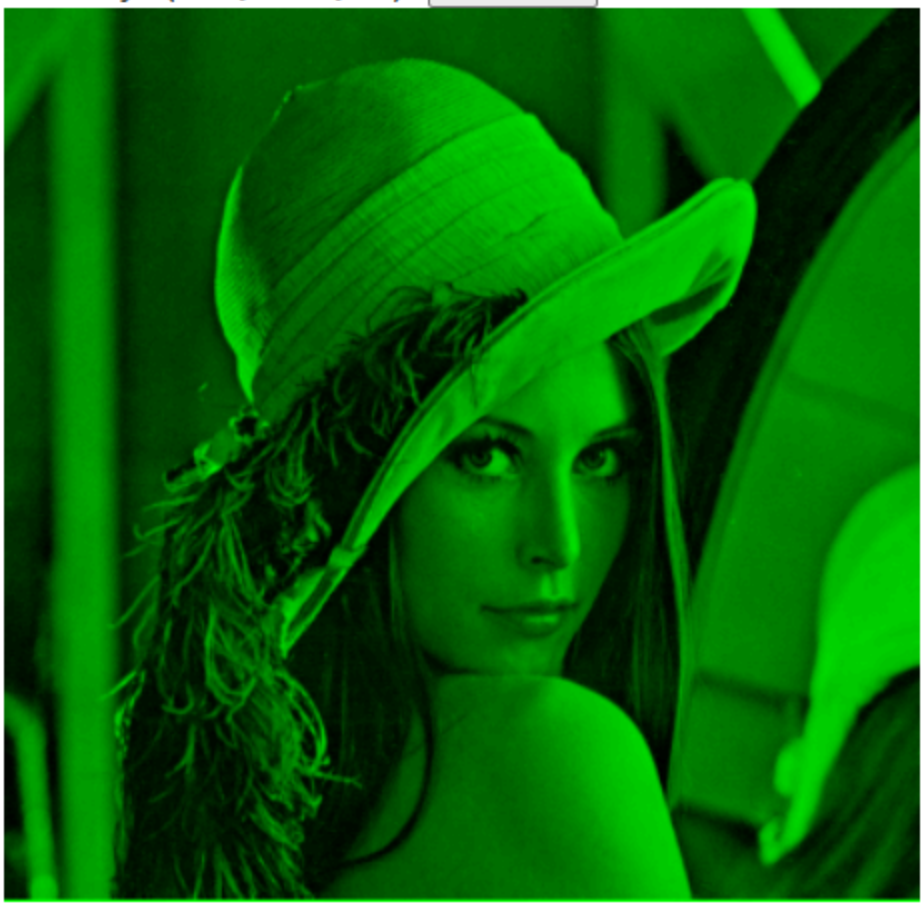
Rotate the image 90 degrees clockwise and display the result

```
rotated_image = image_grayed.rotate(-90, expand=True)
display(rotated_image)
```

[255 0 0]]]
ndarray (357, 366, 3) show data



[0 255 0]]]
ndarray (357, 366, 3) show data



ndarray (357, 366, 3) show data

Image color split

```
left=100
upper=50
right=200
lower=150
cropped_image=image_colored.crop((left,upper,right,lower))
display(cropped_image)
```