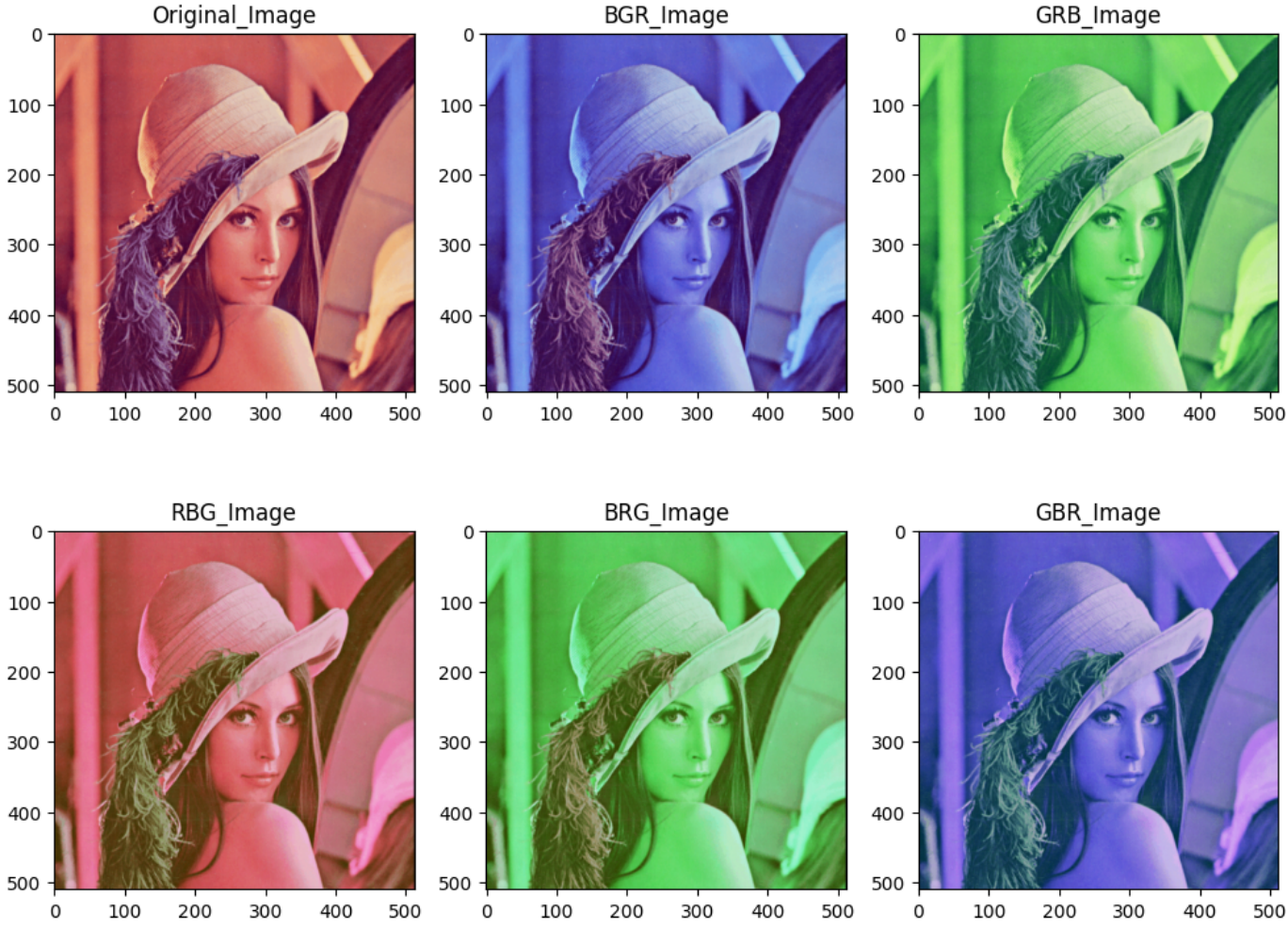
In [7]:
```
import matplotlib.pyplot as plt
import matplotlib.image as mpimg
from PIL import Image
```

In [57]:
```
def chswap(image):
    width, height = image.size
    image_rgb = image.convert('RGB')
    r, g, b = image_rgb.split()

    # Red(out) = Blue(in)
    image_bgr = Image.merge('RGB', (b, g, r))

    # Green(out) = Red(in)
    image_grb = Image.merge('RGB', (g, r, b))

    # Blue(out) = Green(in)
    image_rbg = Image.merge('RGB', (r, b, g))

    # Blue(out) = Green(in)
    image_brg = Image.merge('RGB', (b, r, g))

    # Green(in) = Red(out)
    image_gbr = Image.merge('RGB', (g, b, r))

    fig = plt.figure(figsize=(12, 9))

    fig.add_subplot(2, 3, 1)
    plt.imshow(image)
    plt.title("Original_Image")

    fig.add_subplot(2, 3, 2)
    plt.imshow(image_bgr)
    plt.title("BGR_Image")

    fig.add_subplot(2, 3, 3)
    plt.imshow(image_grb)
    plt.title("GRB_Image")

    fig.add_subplot(2, 3, 4)
    plt.imshow(image_rbg)
    plt.title("RBG_Image")

    fig.add_subplot(2, 3, 5)
    plt.imshow(image_brg)
    plt.title("BRG_Image")

    fig.add_subplot(2, 3, 6)
    plt.imshow(image_gbr)
    plt.title("GBR_Image")
```

In [58]:
```
colored_lena = Image.open("lena_colored.png")
chswap(colored_lena)
```


Original_Image
BGR_Image
GRB_Image
RBG_Image
BRG_Image
GBR_Image
0
100
200
300
400
500