

```
from PIL import Image
import matplotlib.pyplot as plt
import skimage.io as io

def read_image_pil(file_path):
    img = Image.open(file_path)
    return img

def save_image_pil(img, output_path):
    img.save(output_path)

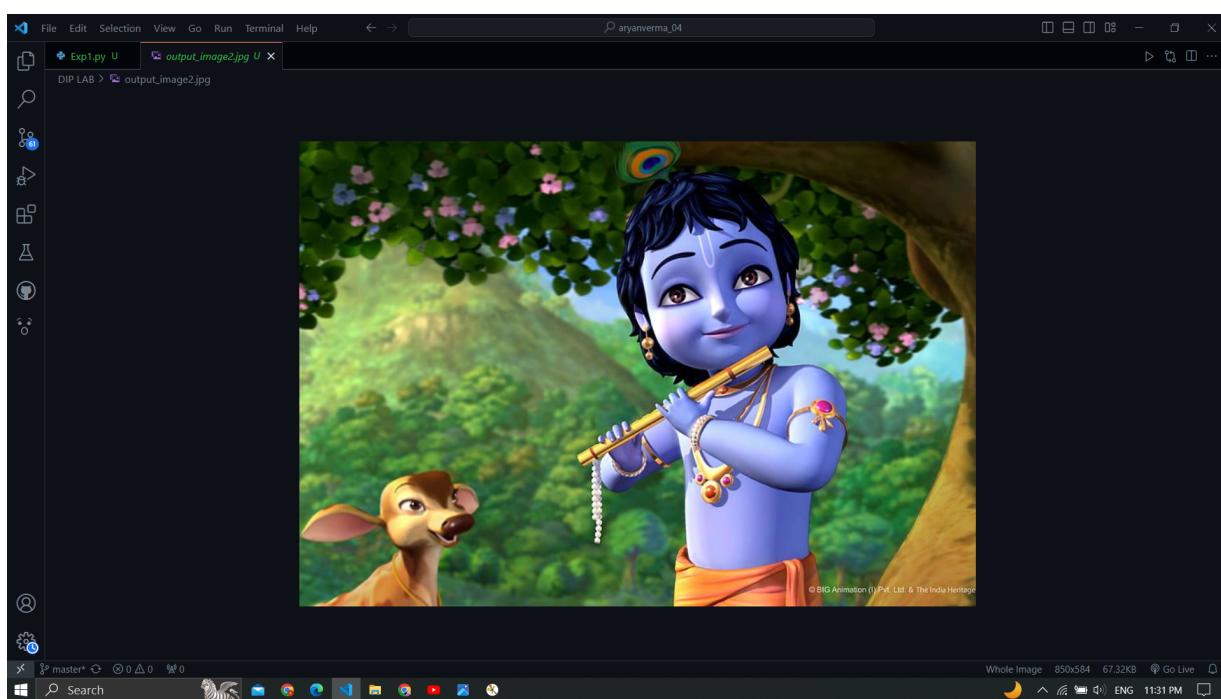
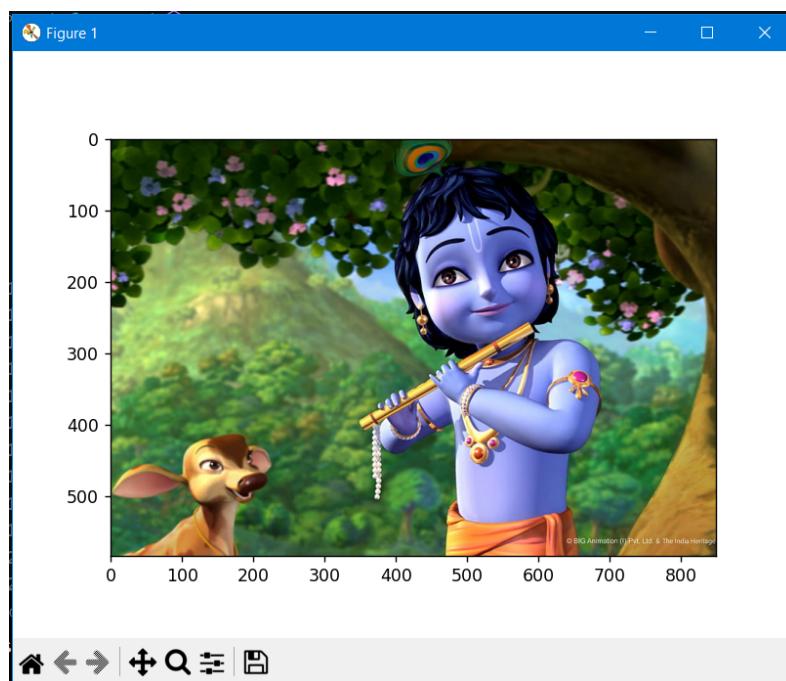
def display_image_pil(img):
    img.show()

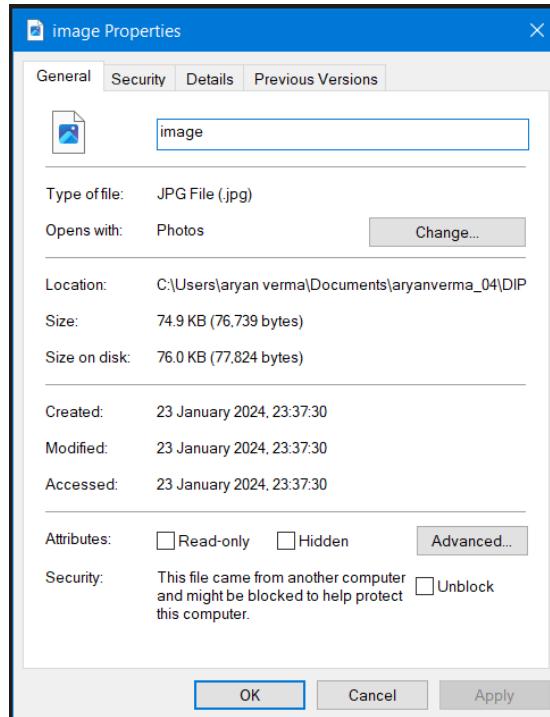
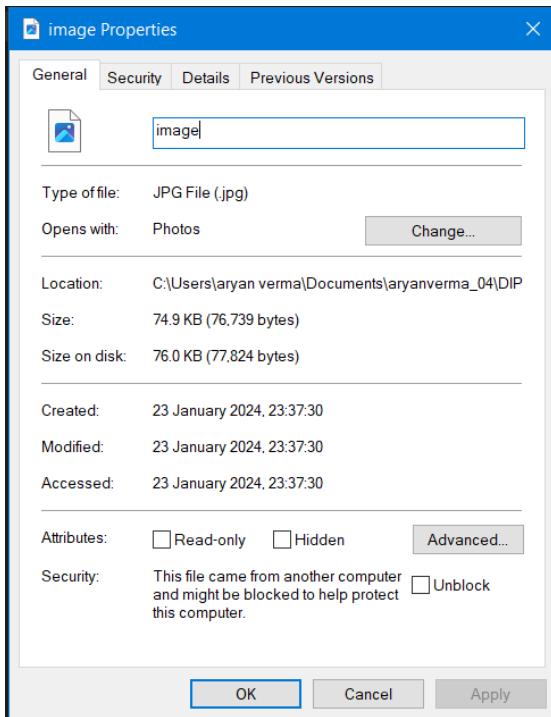
def read_image_matplotlib(file_path):
    img = plt.imread(file_path)
    return img

def save_image_matplotlib(img, output_path):
    plt.imsave(output_path, img)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS

PS C:\Users\aryan verma\Documents\aryanverma_04> python -u "c:\Users\aryan verma\Documents\aryanverma_04\Expt1.py"





main.py U image.jpg U

```
DIP LAB > exp2 > main.py > ...
1  from PIL import Image
2
3  def convert_image(input_path, output_path, output_format):
4      try:
5          # Open the input image
6          with Image.open(input_path) as img:
7              # Convert and save the image to the specified format
8              img.save(output_path, format=output_format)
9              print(f"Image converted and saved to {output_path} in {output_format} format.")
10     except Exception as e:
11         print(f"Error: {e}")
12
13 if __name__ == "__main__":
14     # Example usage
15     input_path = r"C:\Users\aryan verma\Documents\aryanverma_04\image.jpg"
16     output_path = r"C:\Users\aryan verma\Documents\aryanverma_04\image.png" # Changed output format to PNG
17     output_format = "PNG"
18
19     convert_image(input_path, output_path, output_format)
20
```

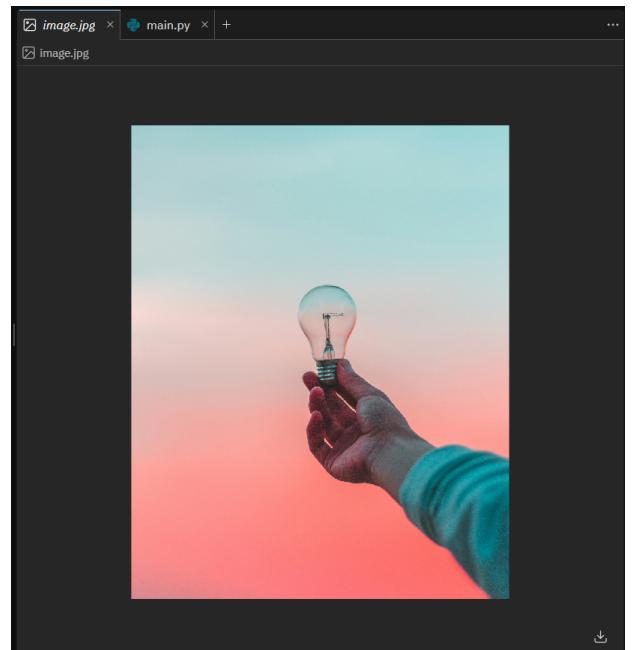
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS

```
PS C:\Users\aryan verma\Documents\aryanverma_04> python -u "c:\Users\aryan verma\Documents\aryanverma_04\image.jpg"
PS C:\Users\aryan verma\Documents\aryanverma_04> python -u "c:\Users\aryan verma\Documents\aryanverma_04\image.png"
Image converted and saved to C:\Users\aryan verma\Documents\aryanverma_04\image.jpg in PNG format.
PS C:\Users\aryan verma\Documents\aryanverma_04>
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS

```
PS C:\Users\aryan verma\Documents\aryanverma_04> python -u "c:\Users\aryan verma\Documents\aryanverma_04\image.jpg"
PS C:\Users\aryan verma\Documents\aryanverma_04> python -u "c:\Users\aryan verma\Documents\aryanverma_04\image.png"
Image converted and saved to C:\Users\aryan verma\Documents\aryanverma_04\image.jpg in PNG format.
PS C:\Users\aryan verma\Documents\aryanverma_04>
```

```
main.py x +  
main.py > ...  
1 from PIL import Image  
2  
3  
4 v def convert_image(input_path, output_path, output_format):  
5 v     try:  
6         # Open the input image  
7         with Image.open(input_path) as img:  
8             # Convert and save the image to the specified format  
9             img.save(output_path, format=output_format)  
10            print()  
11                f"Image converted and saved to {output_path} in  
{output_format} format."  
12        )  
13    except Exception as e:  
14        print(f"Error: {e}")  
15  
16  
17 v if __name__ == "__main__":  
18     # Example usage  
19     input_path = r"image.jpg"  
20     output_path = r"image.png" # Changed output format to PNG  
21     output_format = "PNG"  
22  
23     convert_image(input_path, output_path, output_format)  
24
```



```
>_ Console x +  
  > Formatter Formatting completed in 15553ms. 15s on 23:43:38, 01/23 ✓  
  < Run 17s on 23:45:04, 01/23 ✓  
  Image converted and saved to image.png in PNG format.
```

