Assignment-14

1.What does RGBA stand for?

Ans1- Red Green Blue Alpha

2. From the Pillow module, how do you get the RGBA value of any images?

Ans2-In the Pillow module, you can get the RGBA value of any image using the getpixel() method.

3. What is a box tuple, and how does it work?

Ans3-A "box tuple" is a term commonly used in computer graphics and imaging libraries like Pillow (PIL), and it refers to a tuple that defines a rectangular region or bounding box within an image. The box tuple typically consists of four integer values representing the left, upper, right, and lower coordinates of the rectangle. The order of these values in the tuple is often (left, upper, right, lower).

Left: The X-coordinate of the left edge of the rectangle.

Upper: The Y-coordinate of the upper edge of the rectangle.

Right: The X-coordinate of the right edge of the rectangle (not inclusive).

Lower: The Y-coordinate of the lower edge of the rectangle (not inclusive).

4. Use your image and load in notebook then, How can you find out the width and height of an Image object?

Ans4-To find out the width and height of an Image object in a Jupyter Notebook using the Pillow (PIL) library, you can use the .size attribute of the Image object.

5. What method would you call to get Image object for a 100×100 image, excluding the lower-left quarter of it?

Ans5- To get an Image object for a 100x100 image, excluding the lower-left quarter of it, you can use the crop() method of the Pillow (PIL) Image object.

6. After making changes to an Image object, how could you save it as an image file?

Ans6- To save changes made to an Image object as an image file using the Pillow (PIL) library, you can use the .save() method.

from PIL import Image

image = Image.open('example.jpg')

image.save('modified\_image.jpg')

7. What module contains Pillow’s shape-drawing code?

Ans7- Pillow's shape-drawing code is contained within the PIL.ImageDraw module. This module provides functionality for drawing various shapes, lines, and text on Pillow (PIL) Image objects. You can use it to add shapes and annotations to images programmatically.

8. Image objects do not have drawing methods. What kind of object does? How do you get this kind of object?

Ans8- You are correct that Image objects themselves do not have drawing methods in the Pillow (PIL) library. Instead, drawing methods are available in a separate object called ImageDraw. To obtain an ImageDraw object, you need to create one from an Image object using the ImageDraw.Draw() function.