1. What does RGBA stand for?

:- RGBA stands for "Red Green Blue Alpha". It is a color model used to represent colors in digital images and computer graphics. The RGBA color model is similar to the RGB color model, but includes an additional "alpha" channel that represents the opacity of the color. The alpha channel specifies how much of the color should be visible, with 0% alpha indicating complete transparency and 100% alpha indicating complete opacity.

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

:- To get the RGBA value of any image using the Pillow module in Python, we can use the getpixel() method of the Image object. The getpixel() method takes the x and y coordinates of the pixel as arguments and returns a tuple containing the RGBA values of the pixel.

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

:- A box tuple is a tuple that specifies a rectangular region in an image. The box tuple contains four integer values that represent the left, upper, right, and lower coordinates of the region, respectively. The coordinates are specified in pixel units, with the origin (0,0) at the top-left corner of the image.

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

:- We can use the size attribute of the Image object. The size attribute returns a tuple containing the width and height of the image, respectively.

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

:- To exclude the lower-left quarter of a 100x100 image, we can define a box tuple that covers the upper-right three-quarters of the image, and then crop the image using that box tuple.

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

# Define the coordinates of the box to crop (left, upper, right, lower)

box = (50, 0, 100, 50)

# Crop the image to the specified box

cropped\_image = image.crop(box)

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

:- To save changes made to an Image object as an image file, we can use the save() method in the Pillow library.

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

:- The module that contains Pillow's shape-drawing code is called ImageDraw. This module provides a number of functions and classes for drawing geometric shapes (such as lines, rectangles, circles, and polygons) on Image objects using different styles and colors.

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

:- We can use the ImageDraw module to create a drawing context for an Image object.To get an ImageDraw object, we can call the ImageDraw.Draw() function, passing in an Image object as its argument.