1. What does RGBA stand for?

ANS: The RGB color model is extended in this specification to include “alpha” to allow specification of the opacity of a color.

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

ANS: Pillow offers the ImageColor.getcolor() function so you don’t have to memorize RGBA values for the colors you want to use. This function takes a color name string as its first argument, and the string 'RGBA' as its second argument, and it returns an RGBA tuple.

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

ANS: The box.tuple submodule provides read-only access for the tuple userdata type. It allows, for a single tuple: selective retrieval of the field contents, retrieval of information about size, iteration over all the fields, and conversion to a Lua table.

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

ANS: PIL.Image.open() is used to open the image and then .width and .height property of Image are used to get the height and width of the image. The same results can be obtained by using .size property.

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

ANS: The crop() method to extract a region of the image that excludes the lower-left quarter. Here's an example of how you could use this method to extract a 75x75 pixel region from the upper-right corner of a 100x100 pixel image:

from PIL import Image

# Open the original image

img = Image.open('path/to/image.png')

# Define the coordinates for the region to extract

left = 25

upper = 0

right = 100

lower = 75

# Use the crop() method to extract the region

img\_cropped = img.crop((left, upper, right, lower))

# Display the cropped image

img\_cropped.show()the crop() method to extract a region of the image that excludes the lower-left quarter. Here's an example of how you could use this method to extract a 75x75 pixel region from the upper-right corner of a 100x100 pixel image:

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

ANS: Image.save() Saves this image under the given filename. If no format is specified, the format to use is determined from the filename extension, if possible.

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

ANS: The 'ImageDraw' module provides simple 2D graphics support for Image Object. Generally, we use this module to create new images, annotate or retouch existing images and to generate graphics on the fly for web use. The graphics commands support the drawing of shapes and annotation of text.

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

ANS: ImageDraw object has several methods for drawing shapes and text onto an Image object.