**Solutions:**

1. What does RGBA stand for?

Ans: RGB stands for red, green, and blue light.  The "a" stands for alpha that is measured from 0 (transparent) to 1(opaque)

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

Ans: ImageColor.getcolor() takes a color name string as 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: many of Pillow’s functions and methods take a box tuple argument. This means pillow is expecting a tuple of four integer coordinates that represent a rectangular region in an image.

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

Ans: # import required module

**from** PIL **import** Image

# get image

filepath **=** "ikraam.png"

img **=** Image.open(filepath)

# get width and height

width **=** img.width

height **=** img.height

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

Ans:

from PIL import Image

import numpy as np

# Opening the image and converting

# it to RGB color mode

# IMAGE\_PATH => Path to the image

img = Image.open(r"Desktop/ii.jpg").convert('RGB')

# Extracting the image data &

# creating an numpy array out of it

img\_arr = np.array(img)

img\_arr[50 : 100, 0: 50] = (0, 0, 0)

# Creating an image out of the previously modified array

img = Image.fromarray(img\_arr)

# Displaying the image

img.show(

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

Ans: im\_crop**.**save('data/dst/astronaut\_pillow\_crop.jpg', quality**=**95)

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

Ans: **ImageDraw**

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

Ans: