

1. What does RGBA stand for?

Ans:- RGBA stands for Red Green Blue Alpha. These are color values used in computer graphics. The alpha channel specifies the opacity of the color.

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

Ans:- To get the RGBA value of an image using the Pillow module, you can use the convert method to convert the image into RGBA mode and then use the getdata method to get the RGBA values

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

Ans:- A box tuple, also known as a bounding box, is a data structure used to define the spatial extent of an object or region in an image. It is represented by a tuple of four values: (x, y, width, height). The (x, y) coordinates specify the top-left corner of the box, and the width and height represent the dimensions of the box.

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

Ans:- To find out the width and height of an Image object using Pillow, you can use the size attribute of an Image object⁵. Here is a sample code:

```
from PIL import Image  
img = Image.open('image_path.png')  
width, height = img.size  
print("Width: ", width)  
print("Height: ", height)
```

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

Ans:- To get an Image object for a 100×100 image excluding the lower-left quarter of it, you can use the crop method provided by Pillow⁶. Here is a sample code:

```
from PIL import Image  
img = Image.open('image_path.png')  
cropped_img = img.crop((0, 0, 100, 75))
```

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

Ans:- After making changes to an Image object, you can save it as an image file using the save method provided by Pillow. Here is a sample code:

```
from PIL import Image  
img = Image.open('image_path.png')  
# make changes to img  
img.save('new_image_path.png')
```

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

Ans:- Pillow's shape-drawing code is contained in the ImageDraw module.

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

Ans:- While Image objects do not have drawing methods, ImageDraw objects do. You can get this kind of object by creating an instance of ImageDraw.Draw and passing an Image object to it. Here is a sample code:

```
from PIL import Image, ImageDraw  
img = Image.open('image_path.png')  
draw = ImageDraw.Draw(img)
```