# Assignment 14

## 1. What does RGBA stand for?

**ANS:**RGBA **is a four-channel format containing data for** Red**,** Green**,** Blue**, and an** Alpha** value. Where Alpha Represents the Opacity

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

**ANS: ImageColor.getcolor( )** gives rgba value of any image

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

**ANS:** A box tuple is a tuple value of four integers: the left-edge x-coordinate, the top-edge y-coordinate,the width, and the height, respectively.

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

In [4]:
```
#Example Program
from PIL import Image
pic = Image.open(R"C:\Users\hrush\OneDrive\Pictures\Saved Pictures\a-0072.jpg")
print(f'Width, Height -> {pic.size}') # Approach 1
print(f'Width, Height -> {pic.width},{pic.height}') # Approach 2
width,height = pic.size
print(f'Width, Height -> {width},{height}') # Approach 3
```

```
Width, Height -> (1024, 576)
Width, Height -> 1024,576
Width, Height -> 1024,576
```

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

In [7]:
```
from PIL import Image
img = Image.open(r"C:\Users\hrush\OneDrive\Pictures\Saved Pictures\a-0072.jpg")
new_img = img.crop((0,50,50,50))
```

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

In [8]:
```
#Example Program
from PIL import Image
pic = Image.open(r"C:\Users\hrush\OneDrive\Pictures\Saved Pictures\a-0072.jpg")
pic.save('pic2.jpg')
```

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

**ANS:** Pillows **ImageDraw** module contains Shape drawing methods

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

**ANS:** ImageDraw objects have shape-drawing methods such as **point( )**, **line( )**, or **rectangle( )**.They are returned by passing the Image object to the **ImageDraw.Draw( )** function.

In [ ]:
```

```