In [98]:

```
from PIL import Image     # Loading PIL package
```

In [99]:

```
# Load and display image file

Ara1 = Image.open('Ara.png')
```

In [100]:

```
# Displaying image

Ara1
```

Out[100]:

In [101]:

```
# Width and hight of the image.
#That means in the above image 256 pixels in in each column and 256 pixels in ea

Ara1.size
```

Out[101]:

```
(256, 256)
```

In [102]:

```
# Flipping image horizontally without using function

def horizontal_flipping(image):
    width, height = image.size
    pixels = image.load()

    for x in range(width // 2):
        for y in range(height):
            pixel_original = pixels[x, y]
            pixel_result = pixels[width - 1 - x, y]
            pixels[x, y] = pixel_result
            pixels[width - 1 - x, y] = pixel_original

    return image
```

In [103]:

```
# Printing Horizontally flipped Ara Image
horizontal_image = horizontal_flipping(Ara1)
horizontal_image
```

Out[103]:

In [104]:

```
# Saving Horizontal Flipping image

#horizontal_image.save("Ara_horizontal_flipping_image.png")
```

In [105]:

```
Ara2 = Image.open('Ara.png')
```

In [106]:

```
# Flipping image Vertically without using function

def vertical_flipping(image):
    width, height = image.size
    pixels = image.load()

    for x in range(width):
        for y in range(height // 2):
            pixel_original = pixels[x, y]
            pixel_result = pixels[x, height - 1 - y]
            pixels[x, y] = pixel_result
            pixels[x, height - 1 - y] = pixel_original

    return image
```

In [107]:

```
# Printing vertically flipped Ara Image
vertical_image = vertical_flipping(Ara2)
vertical_image
```

Out[107]:

In [108]:

```
# Saving Vertical Flipping image

#vertical_image.save("Ara_vertical_flipping_image.png")
```

In [109]:

```
Ara3 = Image.open('Ara.png')
```

In [110]:

```
# Horizontal and Vertical flipping

horizontal_vertical_image = horizontal_flipping(vertical_flipping(Ara3))
horizontal_vertical_image
```

Out[110]:

In [112]:

```
# Saving horizontal Vertical Flipping image

horizontal_vertical_image.save("Ara_hoorizontal_vertical_flipping_image.png")
```

In [ ]:

In [ ]:

In [ ]:

END