

## Let's Grow More Data Science Internship

### Task :- 01

#### Task Name :- Image to Pencil Sketch With Python

#### Name :- Ishika Goel

In [8]:

```
# Library we need for converting an image into a pencil sketch with Python is an OpenCV Library in Python.  
import cv2
```

In [9]:

```
## Reading the image:  
image = cv2.imread("peacock.jpg")  
cv2.imshow("Peacock", image)  
cv2.waitKey(0)
```

Out[9]:

-1

In [10]:

```
## We will create a new image by converting the original image to greyscale:  
gray_image = cv2.cvtColor(image, cv2.COLOR_BGR2GRAY)  
cv2.imshow("New Peacock", gray_image)  
cv2.waitKey(0)
```

Out[10]:

-1

In [11]:

```
## Invert the new grayscale image:  
inverted_image = 255 - gray_image  
cv2.imshow("Inverted", inverted_image)  
cv2.waitKey()
```

Out[11]:

-1

In [12]:

```
## Blur the image by using the Gaussian Function in OpenCV:  
blurred = cv2.GaussianBlur(inverted_image, (21, 21), 0)
```

In [13]:

```
## Inverting the blurred image, so that we can easily convert the image into a pencil sketch:  
inverted_blurred = 255 - blurred  
pencil_sketch = cv2.divide(gray_image, inverted_blurred, scale=256.0)  
cv2.imshow("Sketch", pencil_sketch)  
cv2.waitKey(0)
```

Out[13]:

-1

In [14]:

```
## Original image and the pencil sketch:  
cv2.imshow("original image", image)  
cv2.imshow("pencil sketch", pencil_sketch)  
cv2.waitKey(0)
```

Out[14]:

-1

**Thankyou !!**



New Peacock



Inverted



Sketch





