

Name- Sandipan Mukherjee

## LETS GROW MORE INTERNSHIP :

### 01) BEGINNER LEVEL TASK -

#### 4) Image to Pencil Sketch with Python:

#### Import library

In [9]: `import cv2`

#### Read and Show the Image :

In [10]: `image = cv2.imread("puppy.jpg")  
cv2.imshow("Original image", image)  
cv2.waitKey(0)`

Out[10]: `-1`

#### original image to gray scale :

In [11]: `gray_image = cv2.cvtColor(image, cv2.COLOR_BGR2GRAY)  
cv2.imshow("Gray scale image", gray_image)  
cv2.waitKey(0)`

Out[11]: `-1`

#### Invert the new gray scale image :

In [12]: `inverted_gray_image = 255 - gray_image  
cv2.imshow("Inverted image", inverted_gray_image)  
cv2.waitKey(0)`

Out[12]: `-1`

#### Blur the image by using the Gaussian Function :

In [13]: `blurred_image = cv2.GaussianBlur(inverted_gray_image, (21, 21), 0)`

#### Invert the blurred image :

In [14]: `inverted_blurred_image = 255 - blurred_image`

#### Convert the image into a pencil sketch:

In [15]: `pencil_sketch_image = cv2.divide(gray_image, inverted_blurred_image, scale=256.0)  
cv2.imshow("Sketch", pencil_sketch_image)  
cv2.waitKey(0)`

Out[15]: `-1`

#### Original image and the pencil sketch image :

In [16]: `cv2.imshow("original image", image)  
cv2.imshow("pencil sketch", pencil_sketch_image)  
cv2.waitKey(0)`

Out[16]: `-1`

In [ ]: