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LGM-VIP INTERNSHIP

BEGINNER LEVEL TASK -4

Image to Pencil Sketch with Python

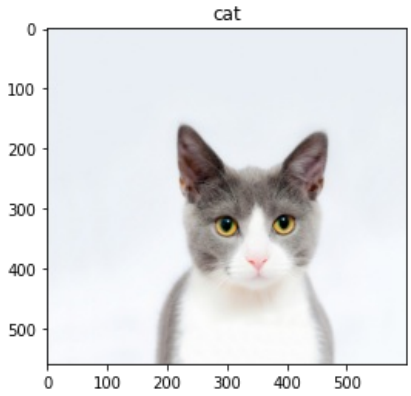
1. IMPORT LIBRARY

In [ ]:
```
import  cv2
import matplotlib.pyplot as plt
%matplotlib inline
```

In [ ]:
```
def show(title,img,cmap='RdBu'):
    plt.imshow(img,cmap=cmap)
    plt.title(title)
```

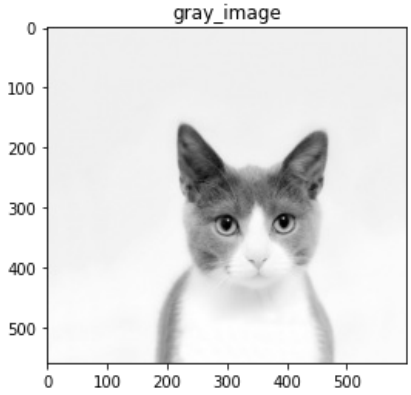
1. IMAGE LOADING

In [ ]:
```
image=plt.imread("cat.jpg")
show("cat",image,'RdBu')
#cv2.imshow("Cat",image)
#cv2.waitKey(0)
```



1. CONVERT TO GRAYSCALE IMAGE

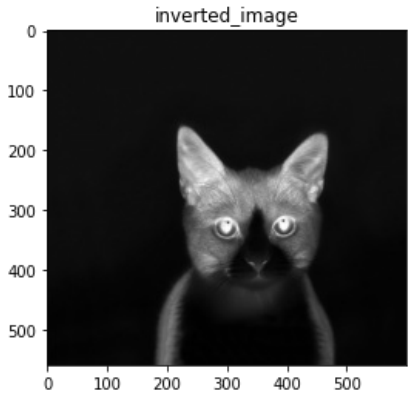
In [ ]:
```
#convert to grayscale image
gray_image=cv2.cvtColor(image,cv2.COLOR_RGB2GRAY)
show("gray_image",gray_image,'gray')
#cv2.imshow("gray_image",gray_image)
#cv2.waitKey(0)
```



1. INVERT THE GRAYSCALE IMAGE

In [ ]:
```
#invert the grayscale image
```

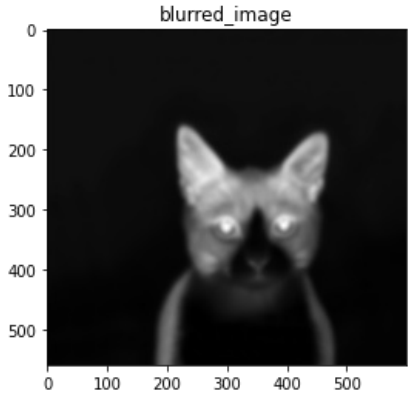
```
inverted_image =255-gray_image
show("inverted_image",inverted_image,'gray')
#cv2.imshow("inverted_image",inverted_image)
#cv2.waitKey(0)
```



1. BLUR THE INVERTED IMAGE

In [ ]:

```
#blur the inverted image
blurred_image =cv2.GaussianBlur(inverted_image,(21,21),0)
show("blurred_image",blurred_image,'gray')
#cv2.imshow("blurred_image",blurred_image)
#cv2.waitKey(0)
```



1. CREATE PENCIL SKETCH IMAGE

In [ ]:

```
inverted_blurred=255-blurred_image
pencil_sketch=cv2.divide(gray_image,inverted_blurred,scale=256.0)
show("pencil_sketch",pencil_sketch,'gray')
```