01.BEGINNER LEVEL TASK

- **TASK 1 -(IMAGE TO PENCIL SKETCH WITH PYTHON)**
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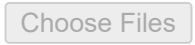
STEP 1 = UPLOAD THE FILES

```
from google.colab import files
uploaded = files.upload()
```



ganpati-wallpapers-20.jpg

- **ganpati-wallpapers-20.jpg**(image/jpeg) - 108386 bytes, last modified: 9/13/2019 - 100% done

```
Saving ganpati-wallpapers-20.jpg to ganpati-wallpapers-20 (1).jpg
```

STEP 2 = IMPORT THE LIBRARIES

```
import numpy as np
import pandas as pd
import cv2 as cv
from google.colab.patches import cv2_imshow
from skimage import io
from PIL import Image
import matplotlib.pylab as plt
```

STEP 3 = WE WILL READ THE IMAGE FROM URLS AND DISPLAY THEM USING OPENCV

```
image=io.imread("ganpati-wallpapers-20.jpg")
cv2_imshow(image)
```

STEP 4 = WE WILL PERFORM THE OPERATION ON THE IMAGE

```
grey_filter = cv.cvtColor(image,cv.COLOR_BGR2GRAY)
cv2_imshow(grey_filter)
  # grey scale image generate a real image
```

```
invert = cv.bitwise_not(grey_filter)
cv2_imshow(invert)
```


```
blur=cv.GaussianBlur(invert,(21,21),0)
cv2_imshow(blur)
```

```
invertedblur=cv.bitwise_not(blur)
cv2_imshow(invertedblur)
```

STEP 5 = AFTER PERFORMING OPERATION WE WILL GET THE PENCIL SKETCHING IMAGE

```
sketch_filter=cv.divide(grey_filter,invertedblur,scale=255.0)
cv2_imshow(sketch_filter)
cv.imwrite("sketch.jpg",sketch_filter)
```


```
True
```

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