

```
import cv2
print("Original image")
image = cv2.imread("/content/download.jpeg")
from google.colab.patches import cv2_imshow
cv2_imshow(image)
```

Original image



```
print("Gary Sale Image")
image1 = cv2.imread("/content/download.jpeg", 0)
cv2_imshow(image1)
cv2.imwrite("/content/download_gray.jpg", image1)
print(image)
```

➡ Gary Sale Image



```
[[[194 183 185]
  [207 187 192]
  [219 184 194]
  ...
  [ 73  36  2]
  [ 74  37  0]
  [ 76  37  0]]

[[201 185 186]
 [193 171 173]
 [190 151 159]
  ...
  [ 76  38  4]
  [ 76  38  3]
  [ 78  39  1]]

[[194 169 165]
 [185 154 153]
 [182 137 140]
  ...
  [ 78  39  7]
  [ 80  39  6]
  [ 82  39  6]]

...

[[236 169 136]
 [211 147 116]
 [202 145 119]
  ...
 [255 252 251]
 [255 250 253]
 [255 249 255]]

[[188 119  86]
 [174 110  79]
 [177 120  94]
  ...
 [255 252 251]
 [255 250 253]
 [255 249 255]]

[[181 112  79]
 [190 125  94]
 [212 155 129]
  ...
 [255 252 251]
 [255 250 253]
 [255 249 255]]]
```

```
image = cv2.imread("/content/download.jpeg")
from google.colab.patches import cv2_imshow
cv2_imshow(image)
from numpy import asarray
data = asarray(image)
print(data)
```



```
[[[194 183 185]
  [207 187 192]
  [219 184 194]
  ...
  [ 73  36  2]
  [ 74  37  0]
  [ 76  37  0]]

[[201 185 186]
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 [255 250 253]
 [255 249 255]]

[[181 112  79]
 [190 125  94]
 [212 155 129]
 ...
 [255 252 251]
 [255 250 253]
 -----
```

✓ Image Rotation

```
import cv2
import imutils
image = cv2.imread("/content/download.jpeg")
from google.colab.patches import cv2_imshow
cv2_imshow(image)
print("Rotated Image")
print("90 degree angle rotation")
R1=imutils.rotate(image,90)
cv2_imshow(R1)
```



Rotated Image
90 degree angle rotation



✓ RGB to CMY Conversion

```
import cv2
print("Original Image")
image = cv2.imread("/content/download.jpeg")
from google.colab.patches import cv2_imshow
cv2_imshow(image)
print("\n\n\nRGB Image")
R,G,B = cv2.split(image)
print("R Complacent")
cv2_imshow(R)

print("G Complacent")
cv2_imshow(G)

print("B Complacent")
cv2_imshow(B)

C = 1-R
M = 1-G
Y = 1-B

print("\n\n\nCMY image")
print("C Complacent")
cv2_imshow(C)

print("M Complacent")
cv2_imshow(M)

print("Y Complacent")
cv2_imshow(Y)
```

Original Image

