

```
import PIL
from PIL import Image
import numpy as np
import matplotlib.pyplot as plt
import cv2

bed_image = Image.open("/content/drive/MyDrive/assassin_auction_bed.jpg")
display(bed_image)
```





```
import PIL
from PIL import Image
import numpy as np
import matplotlib.pyplot as plt
import cv2

bed_image = Image.open("/content/PistolPic.png")
display(bed_image)
new_bed_image = bed_image.resize((400, 400))
display(new_bed_image)

np_am_image = np.array(new_bed_image).astype(float)

red_channel, green_channel, blue_channel = np_am_image[:, :, 0], np_am_image[:, :, 1], np_am_image[:, :, 2]
grayscale_image = (red_channel + blue_channel + green_channel)/3

grayscale_image = np.clip(grayscale_image, 0, 255).astype(np.uint8)

laplacian = cv2.Laplacian(grayscale_image, cv2.CV_64F)
laplacian = np.clip(laplacian, 0, 255).astype(np.uint8)

enhanced_red = np.clip(red_channel + laplacian, 0, 255).astype(np.uint8)
enhanced_green = np.clip(green_channel + laplacian, 0, 255).astype(np.uint8)
enhanced_blue = np.clip(blue_channel + laplacian, 0, 255).astype(np.uint8)

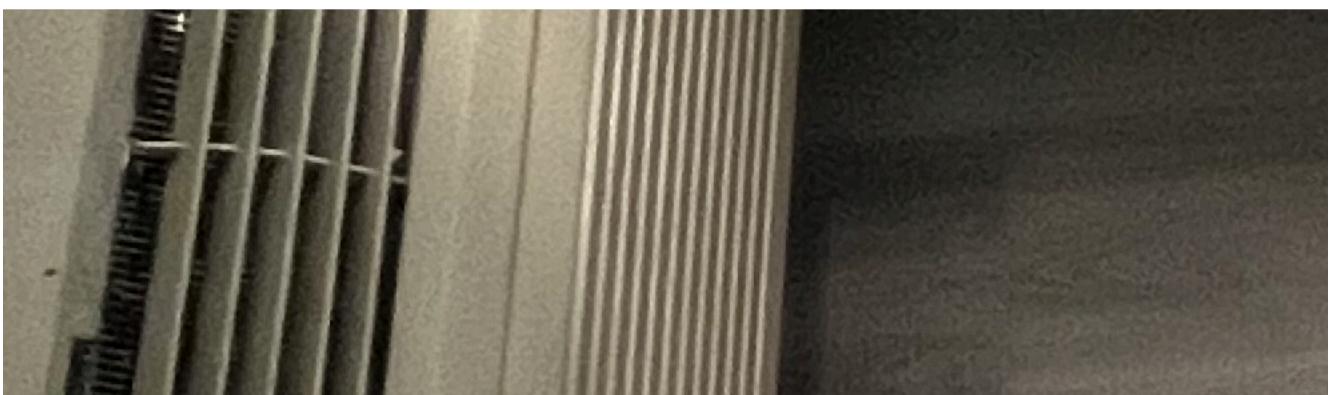
enhanced_image = np.stack([enhanced_red, enhanced_green, enhanced_blue], axis=2)

plt.figure(figsize=(12, 6))

plt.subplot(1, 2, 1)
plt.imshow(np_am_image.astype(np.uint8))
plt.axis("off")
plt.title("Original Color Image")

plt.subplot(1, 2, 2)
plt.imshow(enhanced_image)
plt.axis("off")
plt.title("White Highlight Image")

plt.show()
```





```
import PIL
from PIL import Image
import numpy as np
import matplotlib.pyplot as plt
import cv2

bed_image = Image.open("/content/PistolPic.png")
display(bed_image)
new_bed_image = bed_image.resize((880, 387))
np_am_image = np.array(new_bed_image).astype(float)

red_channel, green_channel, blue_channel = np_am_image[:, :, 0], np_am_image[:, :, 1], np_am_image[:, :, 2]
grayscale_image = (red_channel + blue_channel + green_channel)/3

grayscale_image = np.clip(grayscale_image, 0, 255).astype(np.uint8)

laplacian = cv2.Laplacian(grayscale_image, cv2.CV_64F)
laplacian = np.clip(laplacian, 0, 255).astype(np.uint8)

enhanced_red = np.clip(red_channel - laplacian, 0, 255).astype(np.uint8)
enhanced_green = np.clip(green_channel - laplacian, 0, 255).astype(np.uint8)
enhanced_blue = np.clip(blue_channel - laplacian, 0, 255).astype(np.uint8)

enhanced_image = np.stack([enhanced_red, enhanced_green, enhanced_blue], axis=2)

plt.figure(figsize=(12, 6))

plt.subplot(1, 2, 1)
plt.imshow(np_am_image.astype(np.uint8))
plt.axis("off")
plt.title("Original Color Image")

plt.subplot(1, 2, 2)
plt.imshow(enhanced_image)
plt.axis("off")
plt.title("Black Highlight Image")
```

```
plt.show()
```



Original Color Image



Black Highlight Image

