

Data Augmentation

In [3]:

Out[3]:



In [6]:

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from PIL import Image
import os

# Load the original image
image_path = r'H:\data_science\LINKED IN SHARED\data augmentation\lion.jpg'
original_image = Image.open(image_path)

# Define a directory to save augmented images
save_directory = r'H:\data_science\LINKED IN SHARED\data augmentation\augment
if not os.path.exists(save_directory):
    os.makedirs(save_directory)
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In [7]: # Rotation
rotated_image = original_image.rotate(45)
rotated_image.save(os.path.join(save_directory, 'lion_rotated.jpg'))

# Horizontal Flip
h_flip_image = original_image.transpose(Image.FLIP_LEFT_RIGHT)
h_flip_image.save(os.path.join(save_directory, 'lion_h_flip.jpg'))

# Vertical Flip
v_flip_image = original_image.transpose(Image.FLIP_TOP_BOTTOM)
v_flip_image.save(os.path.join(save_directory, 'lion_v_flip.jpg'))

# Resize
resized_image = original_image.resize((200, 200))
resized_image.save(os.path.join(save_directory, 'lion_resized.jpg'))

# Crop
left, top, right, bottom = 50, 50, 150, 150
cropped_image = original_image.crop((left, top, right, bottom))
cropped_image.save(os.path.join(save_directory, 'lion_cropped.jpg'))

# Convert to Grayscale
grayscale_image = original_image.convert("L")
grayscale_image.save(os.path.join(save_directory, 'lion_grayscale.jpg'))
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In [ ]:
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