Program:

from google.colab import files

uploaded = files.upload()

# Step 2: Import necessary libraries

import cv2

import matplotlib.pyplot as plt

# Step 3: Read the uploaded image

filename = next(iter(uploaded))

image = cv2.imread(filename)

# Step 4: Check if image loaded properly

if image is None:

print("❌ Error: Could not read the image.")

else:

# Step 5: Define new dimensions

original\_height, original\_width = image.shape[:2]

# Bigger size (1.5x the original)

bigger\_size = (int(original\_width \* 1.5), int(original\_height \* 1.5))

bigger = cv2.resize(image, bigger\_size, interpolation=cv2.INTER\_CUBIC)

# Smaller size (0.5x the original)

smaller\_size = (int(original\_width \* 0.5), int(original\_height \* 0.5))

smaller = cv2.resize(image, smaller\_size, interpolation=cv2.INTER\_AREA)

# Step 6: Display all images

plt.figure(figsize=(15, 5))

plt.subplot(1, 3, 1)

plt.title("Original Image")

plt.imshow(cv2.cvtColor(image, cv2.COLOR\_BGR2RGB))

plt.axis('off')

plt.subplot(1, 3, 2)

plt.title("Smaller Image")

plt.imshow(cv2.cvtColor(smaller, cv2.COLOR\_BGR2RGB))

plt.axis('off')

plt.subplot(1, 3, 3)

plt.title("Bigger Image")

plt.imshow(cv2.cvtColor(bigger, cv2.COLOR\_BGR2RGB))

plt.axis('off')

plt.tight\_layout()

plt.show()

Output:

