# Step 1: Install OpenCV (usually pre-installed in Colab)

!pip install opencv-python-headless

# Step 2: Import libraries

import cv2

from google.colab import files

import numpy as np

from matplotlib import pyplot as plt

# Step 3: Upload images

print("Upload the base image (where you want to paste):")

base\_uploaded = files.upload()

print("Upload the source image (from which to crop):")

source\_uploaded = files.upload()

# Step 4: Read the images

base\_image\_path = next(iter(base\_uploaded))

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base\_img = cv2.imread(base\_image\_path)

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# Optional: Resize for simplicity

base\_img = cv2.resize(base\_img, (600, 400))

source\_img = cv2.resize(source\_img, (300, 200))

# Step 5: Crop a region from the source image

# (y1:y2, x1:x2)

crop = source\_img[50:150, 50:250]

# Step 6: Paste the cropped region onto the base image at a desired location

# E.g., top-left corner (100, 100)

y, x = 100, 100

h, w, \_ = crop.shape

base\_img[y:y+h, x:x+w] = crop

# Step 7: Display the result

plt.imshow(cv2.cvtColor(base\_img, cv2.COLOR\_BGR2RGB))

plt.title("Result Image")

plt.axis('off')

plt.show()

# Step 8: Save the result

cv2.imwrite("result\_image.jpg", base\_img)

print("Saved as result\_image.jpg")

