!pip install opencv-python matplotlib

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Requirement already satisfied: opencv-python in /usr/local/lib/python3.10/dist-packages (4.10.0.84)
     Requirement already satisfied: matplotlib in /usr/local/lib/python3.10/dist-packages (3.7.1)
     Requirement already satisfied: numpy>=1.21.2 in /usr/local/lib/python3.10/dist-packages (from opencv-python) (1.26.4)
     Requirement already satisfied: contourpy>=1.0.1 in /usr/local/lib/python3.10/dist-packages (from matplotlib) (1.3.0)
     Requirement already satisfied: cycler>=0.10 in /usr/local/lib/python3.10/dist-packages (from matplotlib) (0.12.1)
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     Requirement already satisfied: kiwisolver>=1.0.1 in /usr/local/lib/python3.10/dist-packages (from matplotlib) (1.4.7)
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     Requirement already satisfied: pillow>=6.2.0 in /usr/local/lib/python3.10/dist-packages (from matplotlib) (10.4.0)
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     Requirement already satisfied: python-dateutil>=2.7 in /usr/local/lib/python3.10/dist-packages (from matplotlib) (2.8.2)
     Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.10/dist-packages (from python-dateutil>=2.7->matplotlib) (1.16.0)
import cv2
import matplotlib.pyplot as plt
import numpy as np
from google.colab import files
uploaded = files.upload()
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image = cv2.imread('photo-1516069677018-378515003435.jfif')
image_path = r'photo-1516069677018-378515003435.jfif' # Replace with your image path
img = cv2.imread(image_path, cv2.IMREAD_GRAYSCALE)
edges = cv2.Canny(img, threshold1=50, threshold2=150)
plt.figure(figsize=(10, 5))
plt.subplot(1, 2, 1)
plt.imshow(image, cmap='gray')
plt.title('Original Image')
plt.subplot(1, 2, 2)
plt.imshow(edges, cmap='gray')
plt.title('Edge-Detected Image')
plt.tight_layout()
plt.show()
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                                 Original Image
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