DSA0210 Computer Vision with Open CV LAB Experiments

Experiment- 6: Perform moving of an image from one place to another.

PROGRAM:

```python
import cv2

import numpy as np

import matplotlib.pyplot as plt


# Read the input image

img = cv2.imread(r"D:\New Folder\input.jpeg")


# Check if image is loaded

if img is None:

    raise FileNotFoundError("Image not found. Check the file path.")


# Get image dimensions

height, width = img.shape[:2]


# Define translation values

tx = 100   # shift right by 100 pixels

ty = 50    # shift down by 50 pixels


# Create translation matrix

translation_matrix = np.float32([

    [1, 0, tx],

    [0, 1, ty]

])


# Apply translation
```

```
translated = cv2.warpAffine(img, translation_matrix, (width, height))


# Display images

plt.figure(figsize=(8, 4))


plt.subplot(1, 2, 1)

plt.imshow(cv2.cvtColor(img, cv2.COLOR_BGR2RGB))

plt.title("Original Image")

plt.axis("off")


plt.subplot(1, 2, 2)

plt.imshow(cv2.cvtColor(translated, cv2.COLOR_BGR2RGB))

plt.title("Translated Image")

plt.axis("off")


plt.tight_layout()

plt.show()
```

OUTPUT: