In [3]:
```
import cv2
import numpy as np

def cross_dissolve_transition(image_A, image_B, num_frames):

    # Check if images are loaded properly
    if image_A is None or image_B is None:
        print("One or both images could not be loaded.")
        return

    # Get the maximum height and width among the images
    height = min(image_A.shape[0], image_B.shape[0])
    width = min(image_A.shape[1], image_B.shape[1])

    # Resize images to the maximum dimensions
    image_A = cv2.resize(image_A, (width, height))
    image_B = cv2.resize(image_B, (width, height))

    # Perform cross-dissolve transition over multiple frames
    for i in range(num_frames + 1):
        alpha = i / num_frames
        beta = 1.0 - alpha

        # Merge images using cv2.addWeighted()
        transition = cv2.addWeighted(image_A, alpha, image_B, beta, 0.0)

        # Display the transition
        cv2.imshow('Cross Dissolve Transition', transition)
        cv2.waitKey(30)  # Adjust the delay between frames

    cv2.destroyAllWindows()


# Load two images
image_A = cv2.imread(r'E:\marg.jpg')
image_B = cv2.imread(r'E:\flower.jpg')

# take the number of frames from the user
num_frames = int(input("Enter the number of frames : "))
# Call the function with image paths and the number of frames
cross_dissolve_transition(image_A, image_B, num_frames)
```

```
Enter the number of frames : 200
```

In [ ]: