

Source Code :

```
# organizing imports
import cv2
import numpy as np

# path to input images are specified and
# images are loaded with imread command
image1 = cv2.imread('practical_7_inp1.jpg')
image2 = cv2.imread('practical_7_inp2.jpg')

# cv2.addWeighted is applied over the
# image inputs with applied parameters
weightedSum = cv2.addWeighted(image1, 0.5, image2, 0.4, 0)
weightedSub = cv2.subtract(image1, image2)
logicalAnd = cv2.bitwise_and(image1, image2)
logicalOR = cv2.bitwise_or(image1, image2)
logicalXOR = cv2.bitwise_xor(image1, image2)
logicalNot = cv2.bitwise_not(image1)
multiplication = cv2.multiply(image1, image2)
division = cv2.divide(image1, image2)

# the window showing output image
# with the weighted sum
cv2.imshow('Weighted Image', weightedSum)
cv2.imshow('Weighted Image subtraction', weightedSub )
cv2.imshow('Weighted Image multiply', multiplication )
cv2.imshow('Weighted Image division', division )

cv2.imshow('Logical And', logicalAnd)
cv2.imshow('Logical OR', logicalOR)
cv2.imshow('Logical XOR', logicalXOR)
cv2.imshow('Logical Not', logicalNot)

# De-allocate any associated memory usage
if cv2.waitKey(0) & 0xff == 27:
    cv2.destroyAllWindows()
```

Input :



Addition

Weighted Image



Subtraction

Weighted Image subtraction



Multiply

Weighted Image multiply



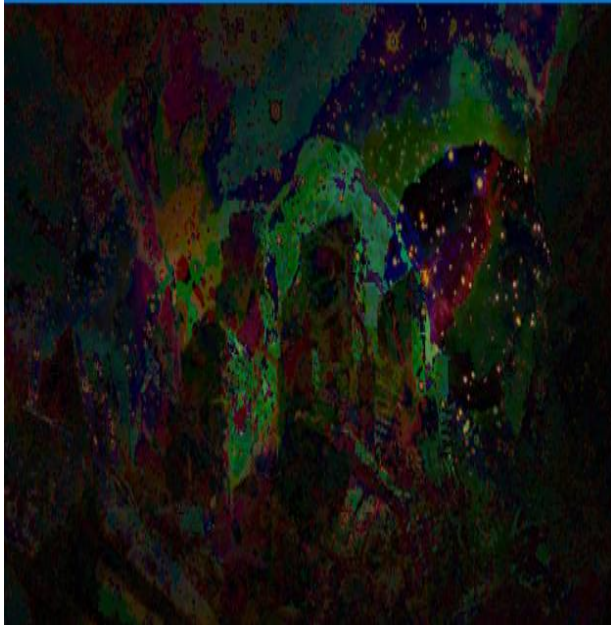
Division

Weighted Image division



AND

Logical And



OR

Logical OR



XOR

Logical XOR



NOT

Logical Not

