

```
In [3]: import cv2 as cv  
import matplotlib.pyplot as plt
```

```
In [17]: img1= cv.imread('imageblr.jpg')  
img2 = cv.imread('lowcontrast.jpg')
```

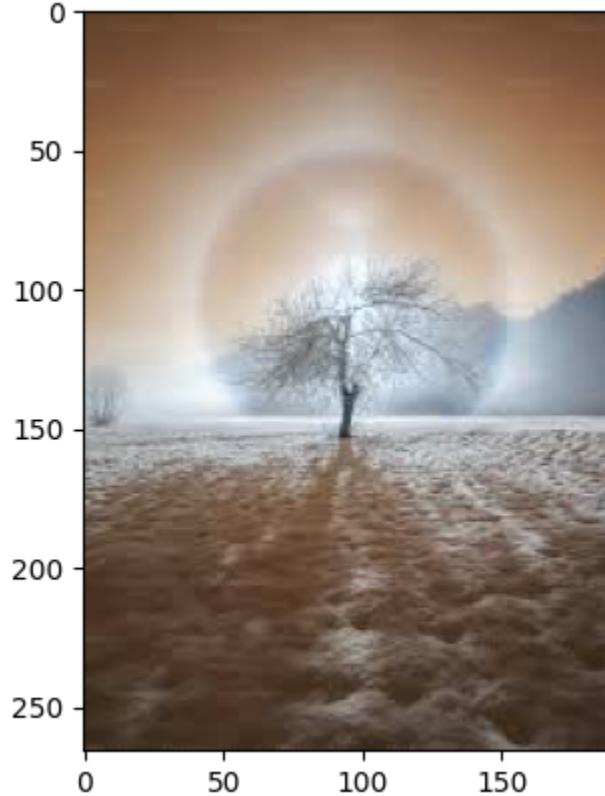
```
In [18]: plt.imshow(img1)
```

```
Out[18]: <matplotlib.image.AxesImage at 0x1d8495af750>
```



```
In [19]: plt.imshow(img2)
```

```
Out[19]: <matplotlib.image.AxesImage at 0x1d8495d1fd0>
```



```
In [20]: img1.shape
```

```
Out[20]: (183, 275, 3)
```

```
In [21]: img2.shape
```

```
Out[21]: (266, 190, 3)
```

```
In [22]: img1_resized = cv.resize(img1, img2.shape[:2][::-1])
```

```
plt.imshow(img1_resized)  
img1_resized.shape
```

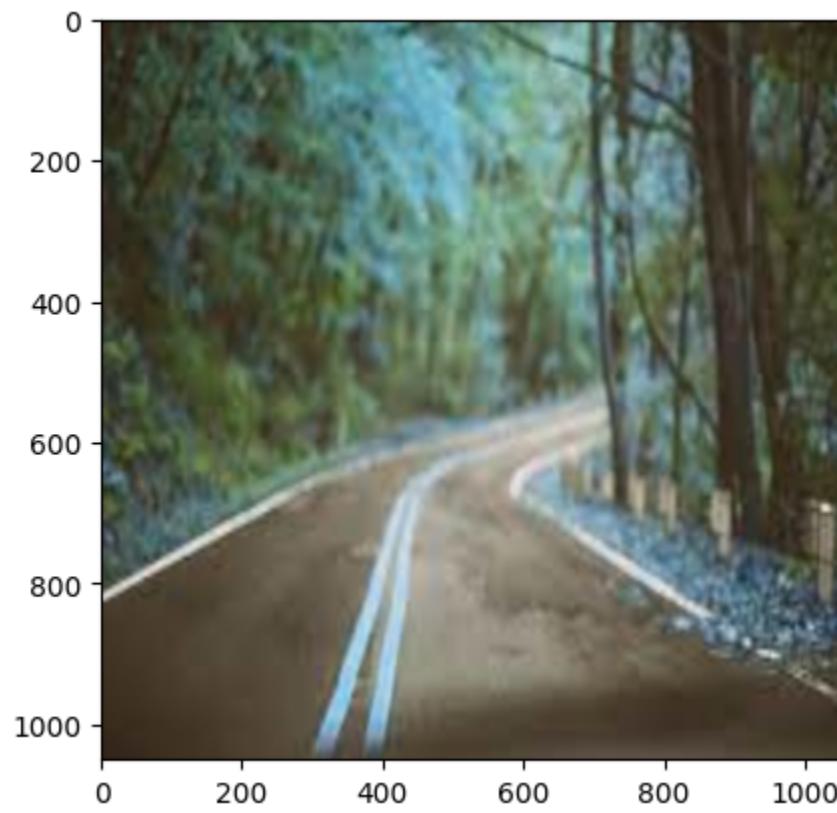
```
Out[22]: (266, 190, 3)
```



```
In [23]: reimg1 = cv.resize(img1, (1050,1050))  
reimg2 = cv.resize(img2, (1050,1050))
```

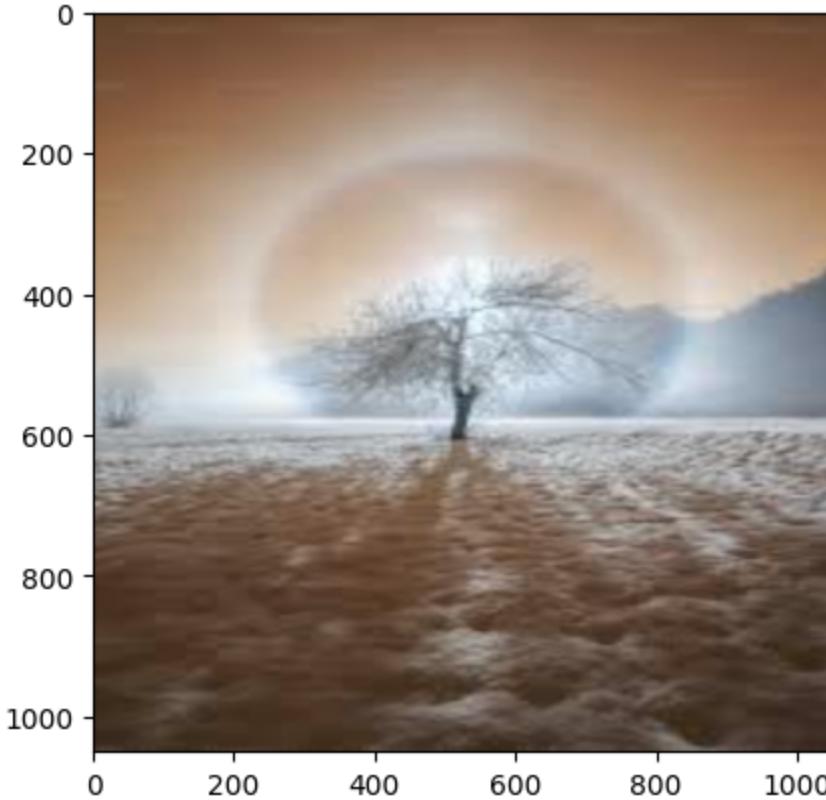
```
In [25]: reimg1.shape  
plt.imshow(reimg1)
```

```
Out[25]: <matplotlib.image.AxesImage at 0x1d8495db690>
```



```
In [27]: reimg2.shape  
plt.imshow(reimg2)
```

Out[27]: <matplotlib.image.AxesImage at 0x1d849468e50>



```
In [29]: weightedsumadd = cv.addWeighted(reimg1, 0.6, reimg2, 0.4, 0)
nonweightedsumadd = cv.add(reimg1, reimg2)
weightedsubtract = cv.subtract(reimg1, reimg2)
weightedmultiply = cv.multiply(reimg1, reimg2)
weighteddivide = cv.divide(reimg1, reimg2)
img_and = cv.bitwise_and(reimg1, reimg2, mask= None)
img_or = cv.bitwise_or(reimg1, reimg2, mask=None)
img_xor = cv.bitwise_xor(reimg1, reimg2, mask=None)
masked = cv.bitwise_and(reimg1, reimg2)
```

```
In [32]: fig, axes = plt.subplots(3, 3, figsize=(15, 15))

# Titles for each subplot
titles = ['Weighted Sum Add', 'Non-Weighted Sum Add', 'Weighted Subtract', 'Weighted Mult
          'Bitwise OR', 'Bitwise XOR', 'Masked']

# Images to display
images = [weightedsumadd, nonweightedsumadd, weightedsubtract, weightedmultiply, weighted
          divide, img_and, img_or, img_xor, masked]

for ax, img, title in zip(axes.flatten(), images, titles):
    ax.imshow(cv.cvtColor(img, cv.COLOR_BGR2RGB)) # Convert to RGB for displaying
    ax.set_title(title)
    ax.axis('off') # Hide axis

plt.tight_layout()
plt.show()
```

Weighted Sum Add



Non-Weighted Sum Add



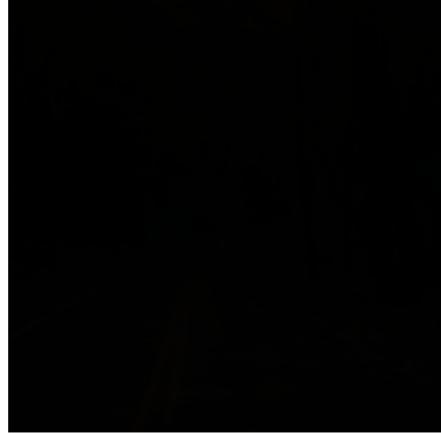
Weighted Subtract



Weighted Multiply



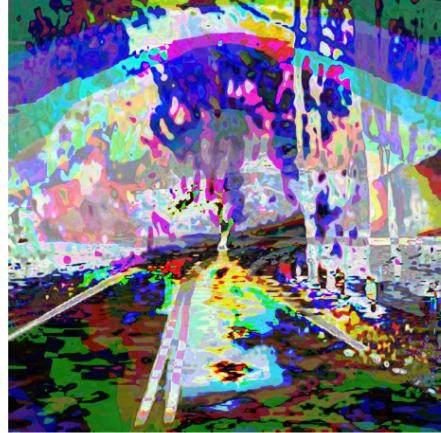
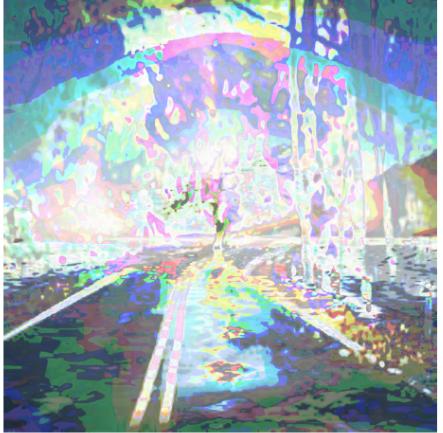
Weighted Divide



Bitwise AND



Bitwise OR



Bitwise XOR



Masked

In []: