LAB 2 – Image Processing

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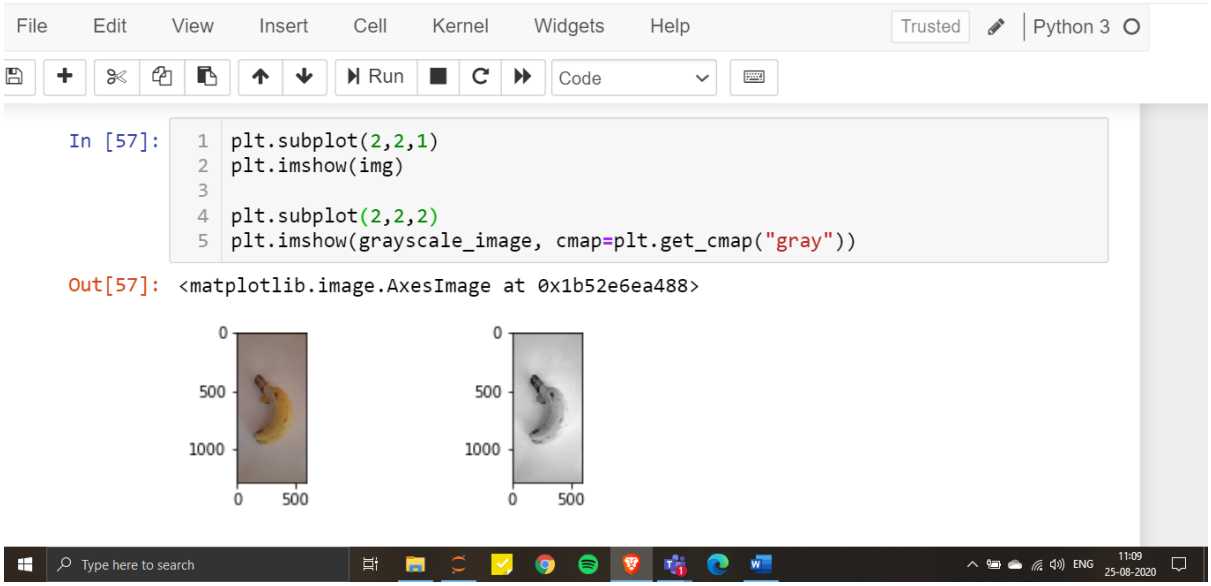

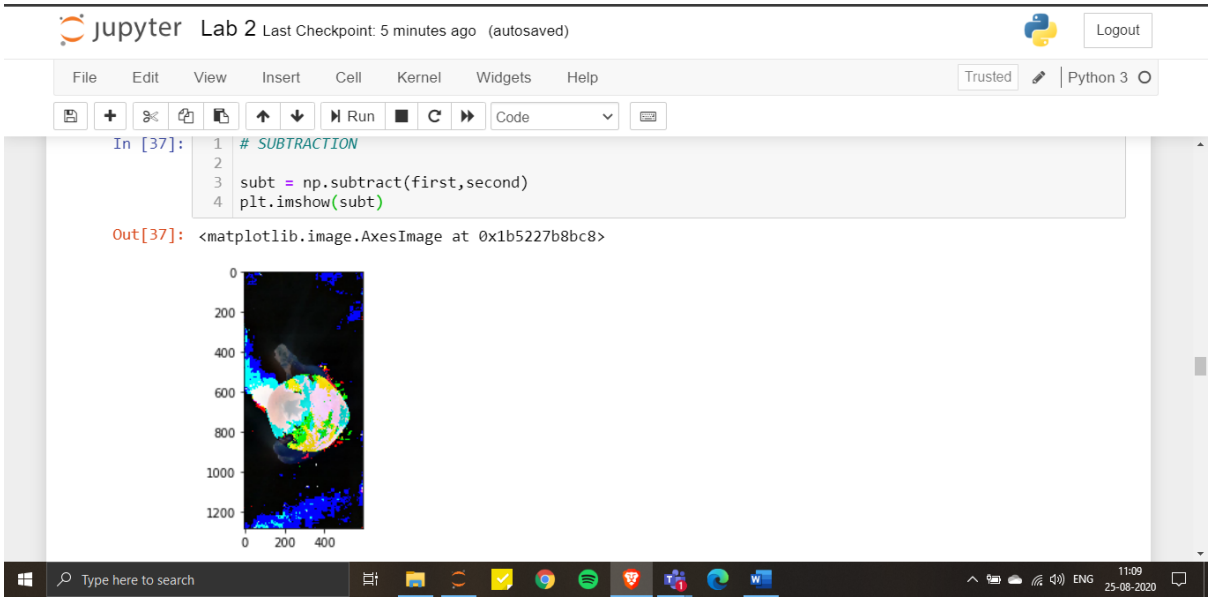

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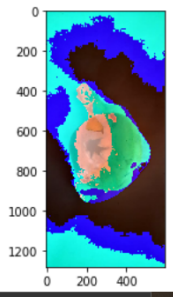
In [38]:
```
# ADDITION

add = np.add(first,second)
plt.imshow(add)
```

Out[38]: <matplotlib.image.AxesImage at 0x1b522139d08>



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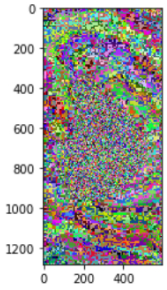
In [55]:
```
# MULTIPLICATION

mult = np.multiply(first,second)
plt.imshow(mult)
```

Out[55]: <matplotlib.image.AxesImage at 0x1b52e5cd088>



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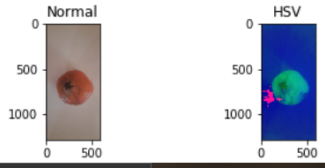
Run Code

In [48]:
```
hsv_image = rgb2hsv(rgb_img)
```

In [104]:
```
plt.subplot(2,2,1)
plt.title("Normal")
plt.imshow(rgb_img)

plt.subplot(2,2,2)
plt.title("HSV")
plt.imshow(hsv_image)
```

Out[104]: <matplotlib.image.AxesImage at 0x1b516631448>



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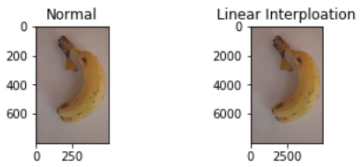
Run Code

```
import cv2
linear_img = cv2.resize(img,None,fx=10,fy=10,interpolation=cv2.INTER_LINEAR)
```

In [94]:
```
plt.subplot(2,2,1)
plt.title("Normal")
plt.imshow(img)

plt.subplot(2,2,2)
plt.title("Linear Interploation")
plt.imshow(linear_img)
```

Out[94]: <matplotlib.image.AxesImage at 0x1b50005bb48>



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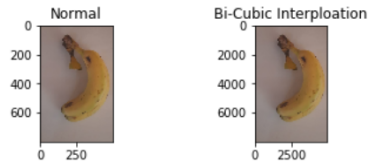
Run Code

In [96]:
```
cubic_img = cv2.resize(img,None,fx=10,fy=10,interpolation=cv2.INTER_CUBIC)
```

In [97]:
```
plt.subplot(2,2,1)
plt.title("Normal")
plt.imshow(img)

plt.subplot(2,2,2)
plt.title("Bi-Cubic Interploation")
plt.imshow(cubic_img)
```

Out[97]: <matplotlib.image.AxesImage at 0x1b50e72e408>



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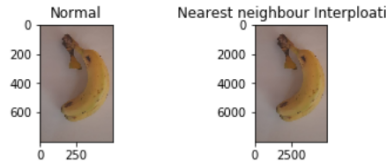
Run Code

In [98]:
```
nearest_neighbour_img = cv2.resize(img,None,fx=10,fy=10,interpolation=cv2.INTER_NEAREST)
```

In [99]:
```
plt.subplot(2,2,1)
plt.title("Normal")
plt.imshow(img)

plt.subplot(2,2,2)
plt.title("Nearest neighbour Interploation")
plt.imshow(nearest_neighbour_img)
```

Out[99]: <matplotlib.image.AxesImage at 0x1b515b7bb88>



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