# Image Analysis with Python

In [1]:
```
import numpy as np
import matplotlib.pyplot as plt
%matplotlib inline
```

In [2]:
```
from PIL import Image
```

In [5]:
```
pic=Image.open("C:/Users/sweety basak/Desktop/xtra/HB.jpg")
pic
```

Out[5]:

In [6]:
```
type(pic)
```

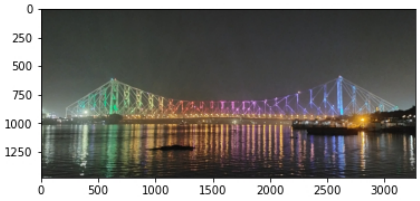
Out[6]:
```
PIL.JpegImagePlugin.JpegImageFile
```

In [8]:
```
pic_ar=np.asarray(pic)
pic_ar.shape
```

Out[8]:
```
(1472, 3264, 3)
```

In [9]:
```
plt.imshow(pic_ar)
```

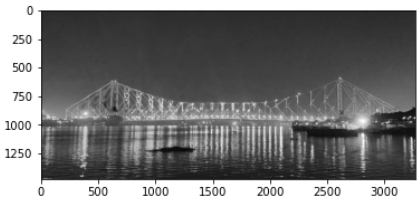
Out[9]:
```
<matplotlib.image.AxesImage at 0x15d9bb5c3d0>
```




In [11]:
```
pic_red=pic_ar.copy()
```

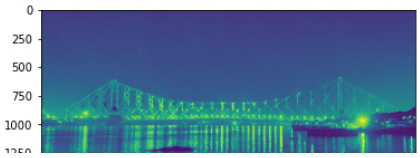
In [12]:
```
plt.imshow(pic_red[:,:,0],cmap="gray")
```

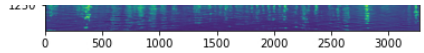
Out[12]:
```
<matplotlib.image.AxesImage at 0x15d9cc43a30>
```




In [16]:
```
plt.imshow(pic_red[:,:,0])
```

Out[16]:
```
<matplotlib.image.AxesImage at 0x15d9bb1e280>
```






In [17]:
```
plt.imshow(pic_red[:,:,1],cmap="gray")
```

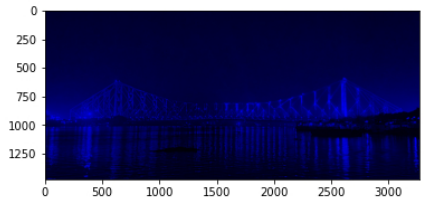
Out[17]: <matplotlib.image.AxesImage at 0x15d9bb41310>


In [19]:
```
pic_red[:,:,1]=0
plt.imshow(pic_red)
```

Out[19]: <matplotlib.image.AxesImage at 0x15d9dbb8b80>

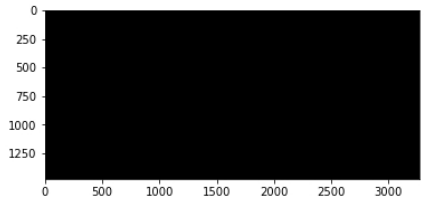

In [20]:
```
pic_red[:,:,0]=0
plt.imshow(pic_red)
```

Out[20]: <matplotlib.image.AxesImage at 0x15da401adf0>




In [21]:
```
pic_red[:,:,2]=0
plt.imshow(pic_red)
```

Out[21]: <matplotlib.image.AxesImage at 0x15da4045af0>




In [ ]:
```
```