```
#DataVis with Seaborn

Assumptions - In the magazine, I did not consider the skin images that were in
B/W. The three classes are size of skin samples, color of skin samples as
required and third one is intensity that has value from 1-5 to take camera
flash into consideration during the magazine photoshoots.

The Data Visualization has primarily used bar graphs, histograph and pie chart
```

In [6]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns

%matplotlib inline
```

In [7]:
```
train = pd.read_csv("dataset.csv")
```

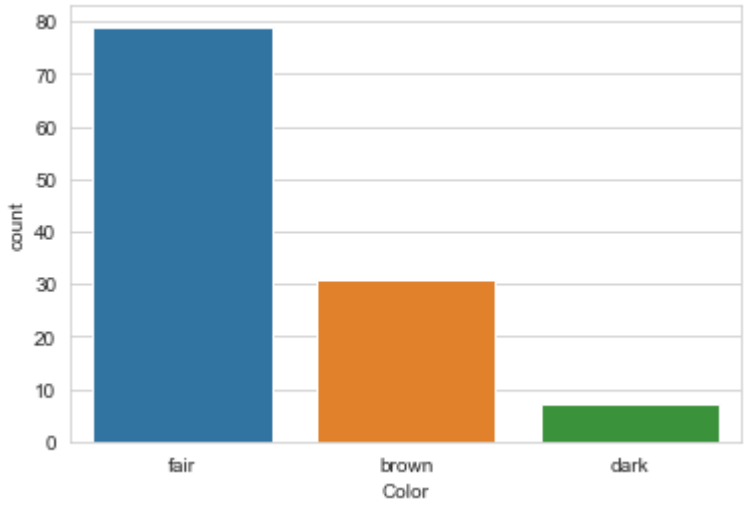
In [8]:
```
train.head()
```

Out[8]:

	Index	Sample_Name	Color	Size	Intensity
0	1	pg_1	fair	medium	3
1	2	pg_7_7	fair	small	4
2	3	pg_9	fair	small	5
3	4	pg_10	brown	medium	3
4	5	pg_13	brown	small	2

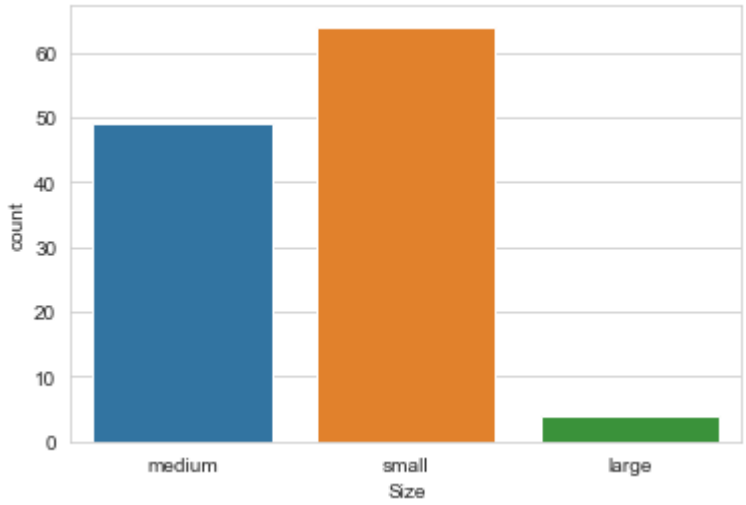
In [9]:
```
sns.set_style('whitegrid')
sns.countplot(x='Color', data=train)
```

Out[9]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x2d618061508>
```



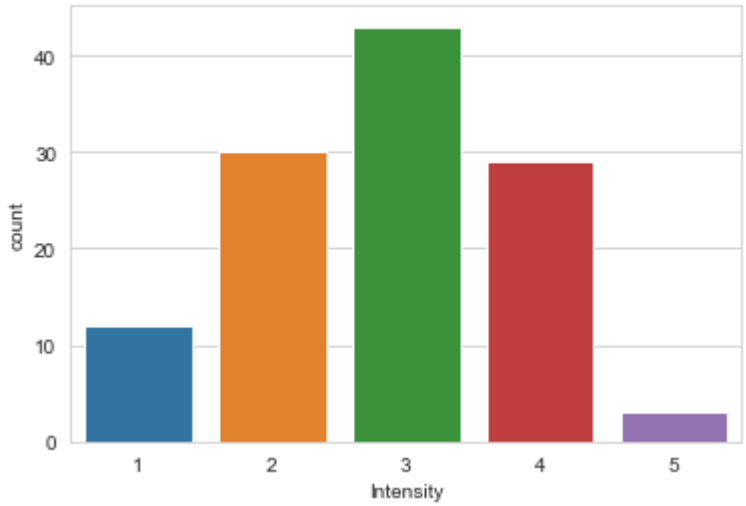
In [10]:
```
sns.countplot(x='Size', data=train)
```

Out[10]: <matplotlib.axes._subplots.AxesSubplot at 0x2d618062d08>



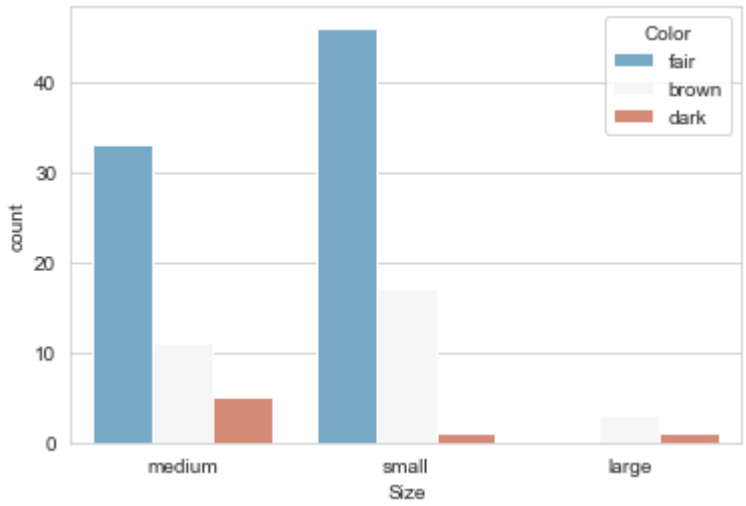
In [11]:
```
sns.countplot(x='Intensity', data=train)
```

Out[11]: <matplotlib.axes._subplots.AxesSubplot at 0x2d618116848>



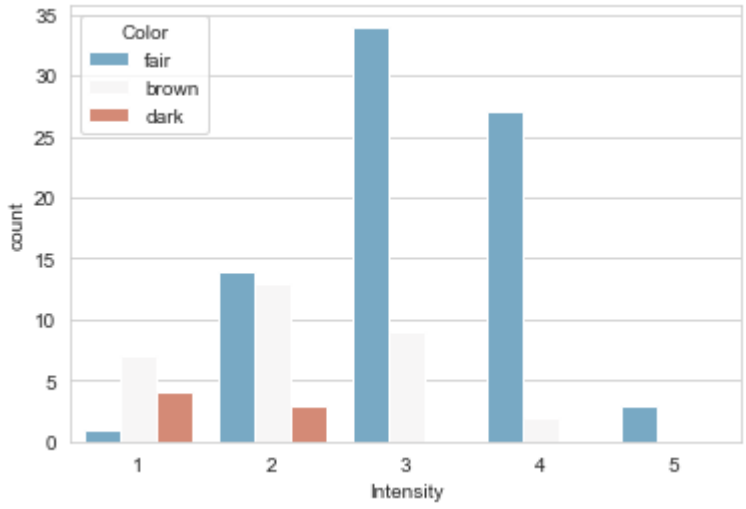
In [12]:
```
sns.set_style('whitegrid')
sns.countplot(x='Size', hue='Color', data=train, palette='RdBu_r')
```

Out[12]: <matplotlib.axes._subplots.AxesSubplot at 0x2d61817c8c8>



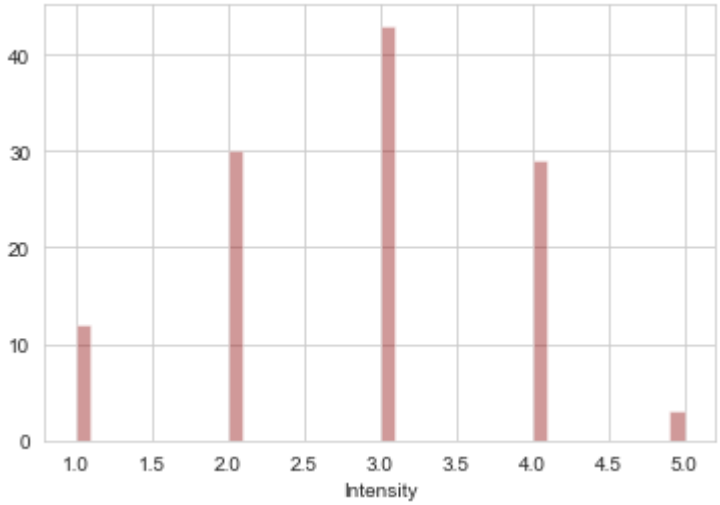
In [13]:
```
sns.set_style('whitegrid')
sns.countplot(x='Intensity', hue='Color', data=train, palette='RdBu_r')
```

Out[13]: <matplotlib.axes._subplots.AxesSubplot at 0x2d6181f5348>



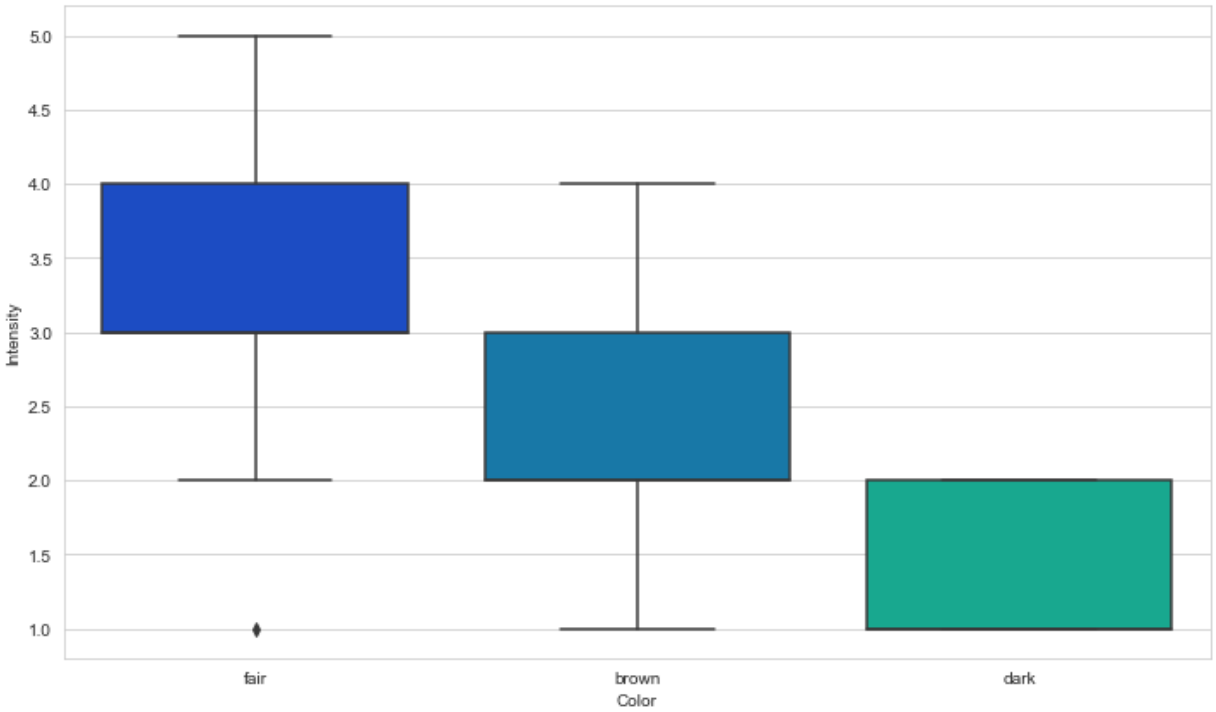
In [14]:
```
sns.distplot(train['Intensity'].dropna(), kde=False, color='darkred', bins=40)
```

Out[14]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x2d6181d5c48>
```



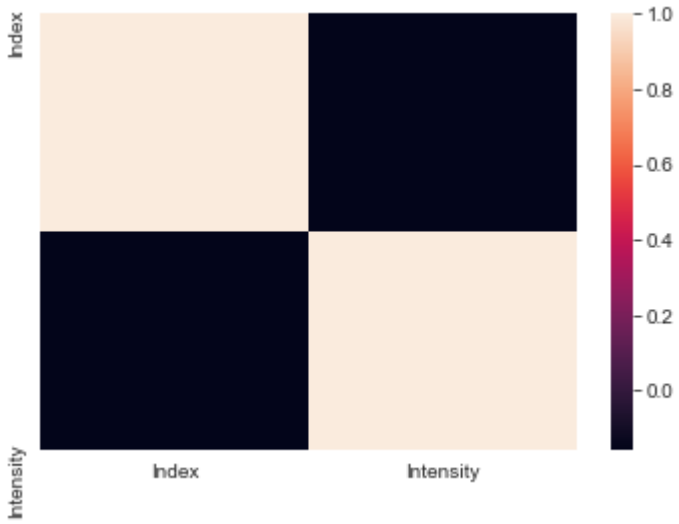
In [15]:
```
plt.figure(figsize=(12, 7))
sns.boxplot(x='Color', y='Intensity', data=train, palette='winter')
```

Out[15]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x2d6182b9f48>
```



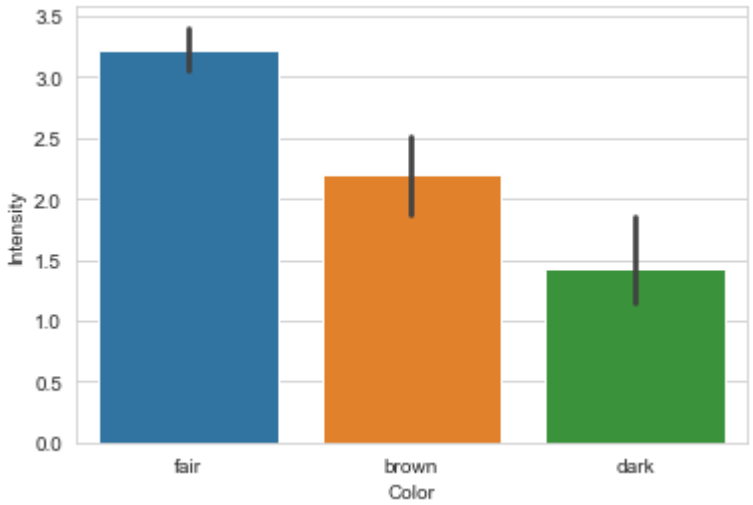
In [16]:
```
sns.heatmap(train.corr())
```

Out[16]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x2d6183fa748>
```



In [18]:
```
sns.barplot(x='Color', y='Intensity', data=train)
```

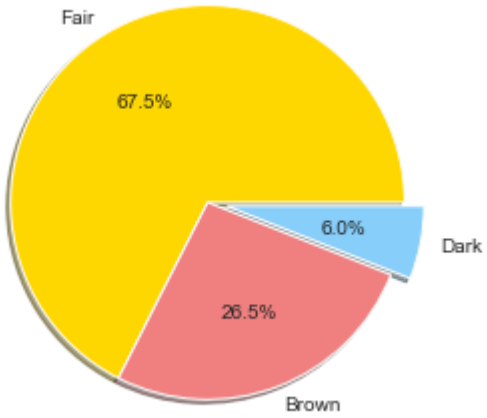
Out[18]:
```
<matplotlib.axes._subplots.AxesSubplot at 0x2d6188a1088>
```



In [19]:
```
# also showing the piechart of percentage
labels = 'Fair', 'Brown', 'Dark'
sizes = [79, 31, 7]
colors = ['gold', 'lightcoral', 'lightskyblue']
explode = (0, 0, 0.1)

plt.pie(sizes, explode=explode, labels=labels, colors=colors, autopct='%1.1f%%',

plt.axis('equal')
plt.show()
```



Thankyou!

In [ ]: