In [1]:
```
import pandas as pd
import numpy as ny
import seaborn as sns
import matplotlib.pyplot as plt
```

In [13]:
```
df = pd.read_csv("Titanic-Dataset.csv")
```

In [14]:
```
df.head()
```

Out[14]:

	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin	Embarked
0	1	0	3	Braund, Mr. Owen Harris	male	22.0	1	0	A/5 21171	7.2500	NaN	S
1	2	1	1	Cumings, Mrs. John Bradley (Florence Briggs Th...	female	38.0	1	0	PC 17599	71.2833	C85	C
2	3	1	3	Heikkinen, Miss. Laina	female	26.0	0	0	STON/O2. 3101282	7.9250	NaN	S
3	4	1	1	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35.0	1	0	113803	53.1000	C123	S
4	5	0	3	Allen, Mr. William Henry	male	35.0	0	0	373450	8.0500	NaN	S

In [15]:
```
df.isnull().sum()
```

Out[15]:
```
PassengerId      0
Survived         0
Pclass           0
Name             0
Sex              0
Age            177
SibSp            0
Parch            0
Ticket           0
Fare             0
Cabin          687
Embarked         2
dtype: int64
```

In [16]:
```
age_mean = df['Age'].mean()
```

In [17]:
```
df['Age'].fillna(value=age_mean,inplace=True)
```

In [18]:
```
df.isnull().sum()
```

Out[18]:
```
PassengerId      0
Survived         0
Pclass           0
Name             0
Sex              0
Age              0
SibSp            0
Parch            0
Ticket           0
Fare             0
Cabin          687
Embarked         2
dtype: int64
```

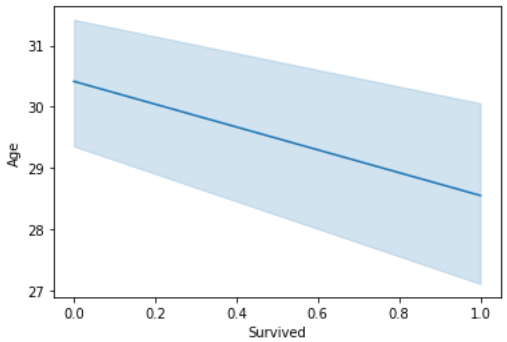
In [20]:
```
df2 = df.drop("Cabin",axis=1)
```

In [21]:
```
df2.isnull().sum()
```

Out[21]:
```
PassengerId    0
Survived       0
Pclass         0
Name           0
Sex            0
Age            0
SibSp          0
Parch          0
Ticket         0
Fare           0
Embarked       2
dtype: int64
```

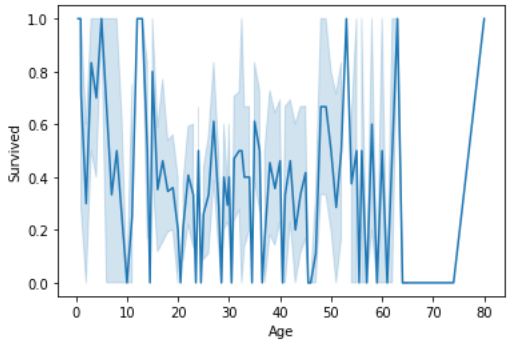
In [22]:
```
sns.lineplot(x ="Survived", y="Age",data=df)
```

Out[22]: <AxesSubplot:xlabel='Survived', ylabel='Age'>



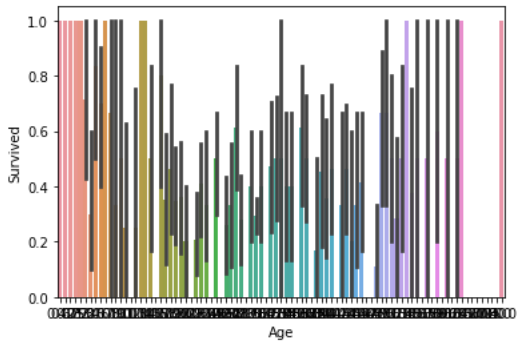
In [27]:
```
sns.lineplot(x="Age", y="Survived", data=df)
```

Out[27]: <AxesSubplot:xlabel='Age', ylabel='Survived'>



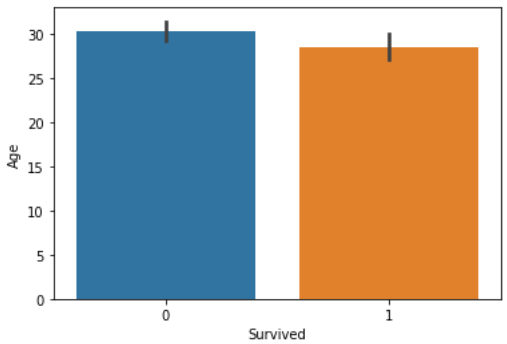
In [28]:
```
sns.barplot(y=df["Survived"],x=df["Age"],data=df)
```

Out[28]: <AxesSubplot:xlabel='Age', ylabel='Survived'>



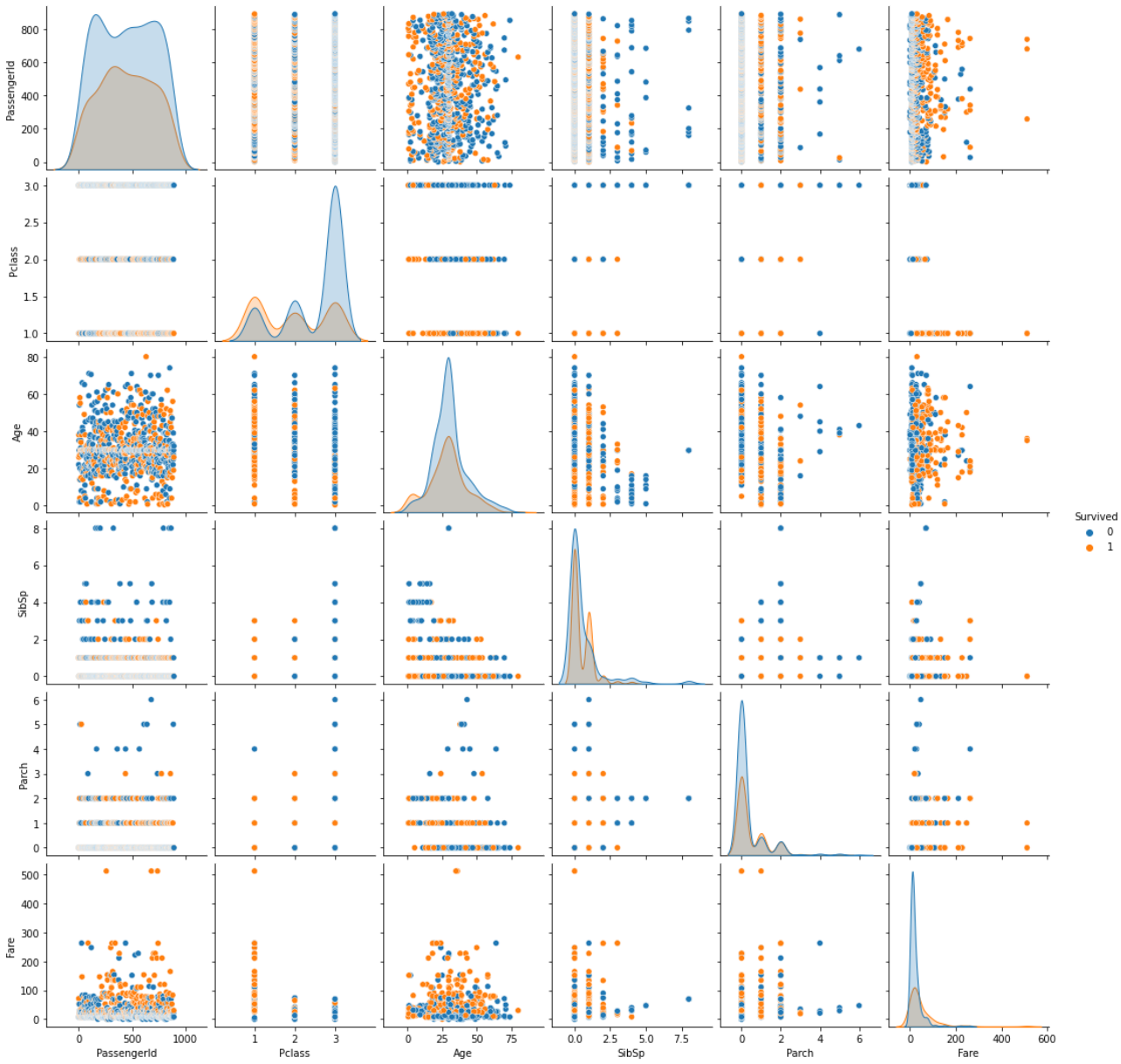
In [29]:
```
sns.barplot(y=df["Age"],x=df["Survived"],data=df)
```

Out[29]: <AxesSubplot:xlabel='Survived', ylabel='Age'>



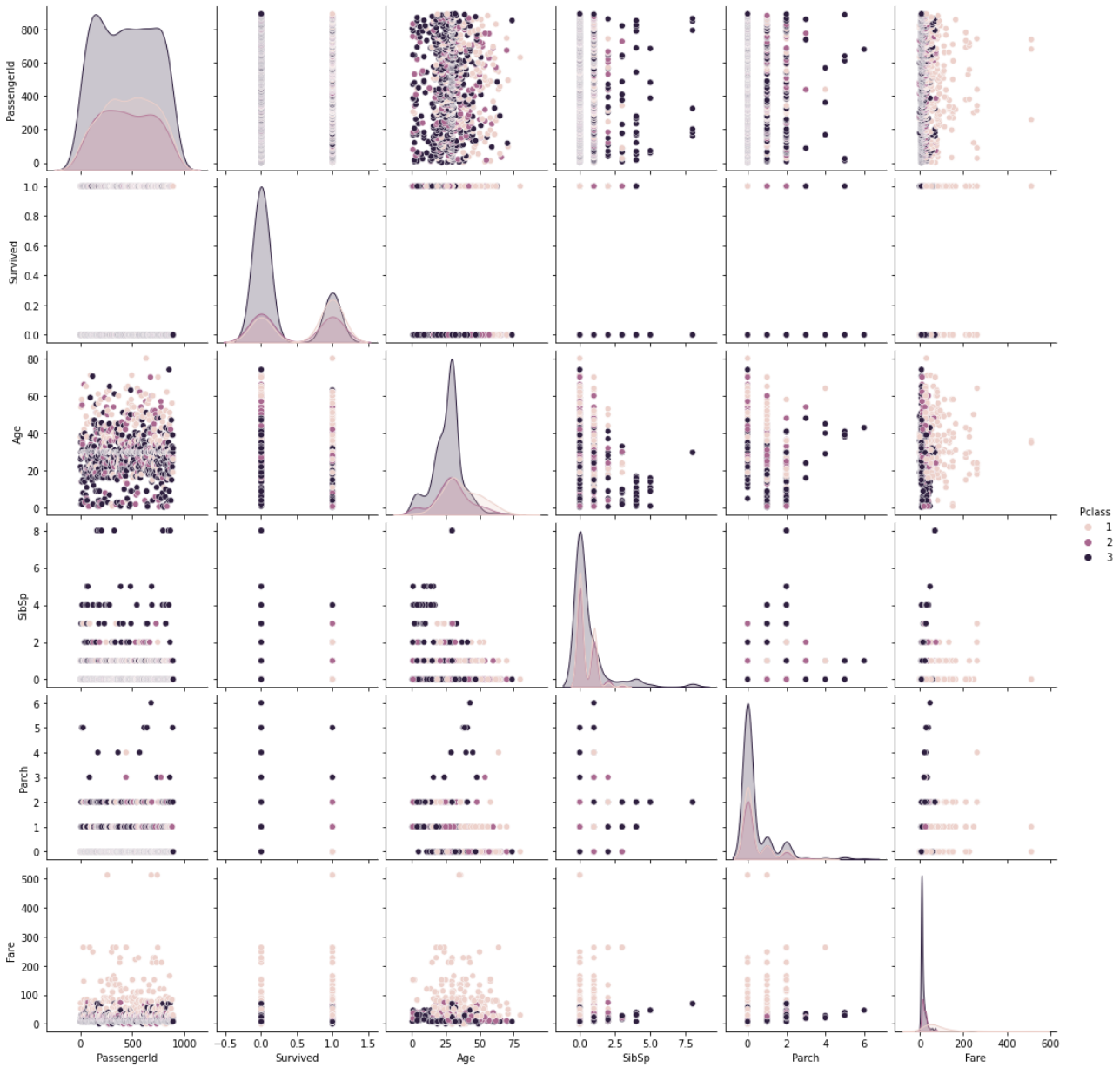
In [30]:
```
sns.pairplot(df,hue="Survived")
```

Out[30]: <seaborn.axisgrid.PairGrid at 0x7f7f10a2d310>



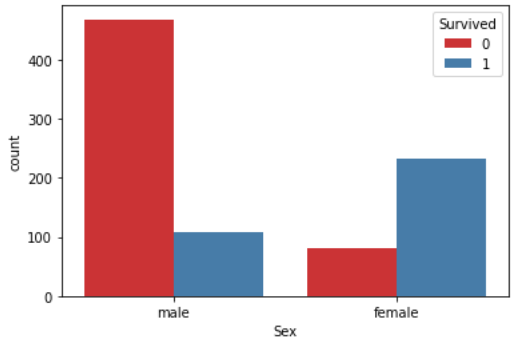
In [31]:
```
sns.pairplot(df,hue="Pclass")
```

Out[31]: <seaborn.axisgrid.PairGrid at 0x7f7f0d1f85e0>



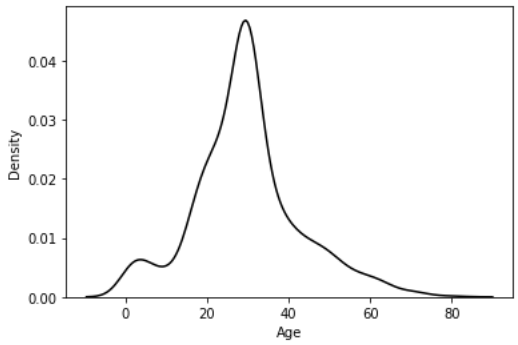
In [33]:
```
sns.countplot(x='Sex', hue = 'Survived', data = df,
palette = 'Set1')
```

Out[33]: <AxesSubplot:xlabel='Sex', ylabel='count'>



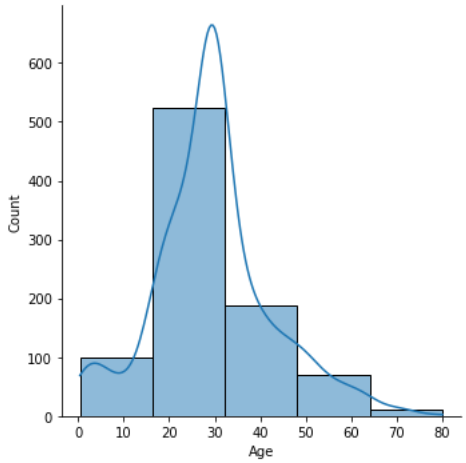
In [35]:
```
sns.kdeplot(x = 'Age' , data = df , color = 'black')
```

Out[35]: <AxesSubplot:xlabel='Age', ylabel='Density'>



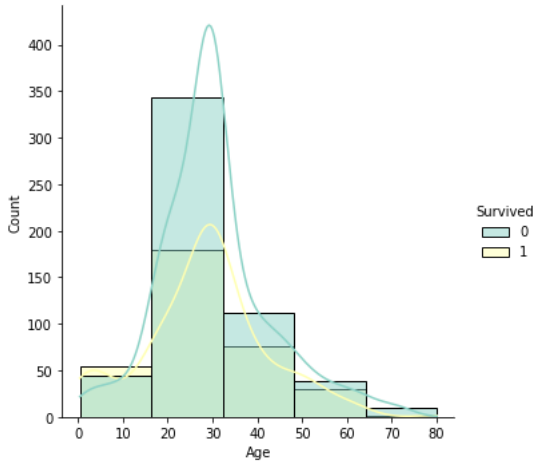
In [36]:
```
sns.displot(x = 'Age',kde=True,bins = 5 , data =df)
```

Out[36]: <seaborn.axisgrid.FacetGrid at 0x7f7f050d17c0>



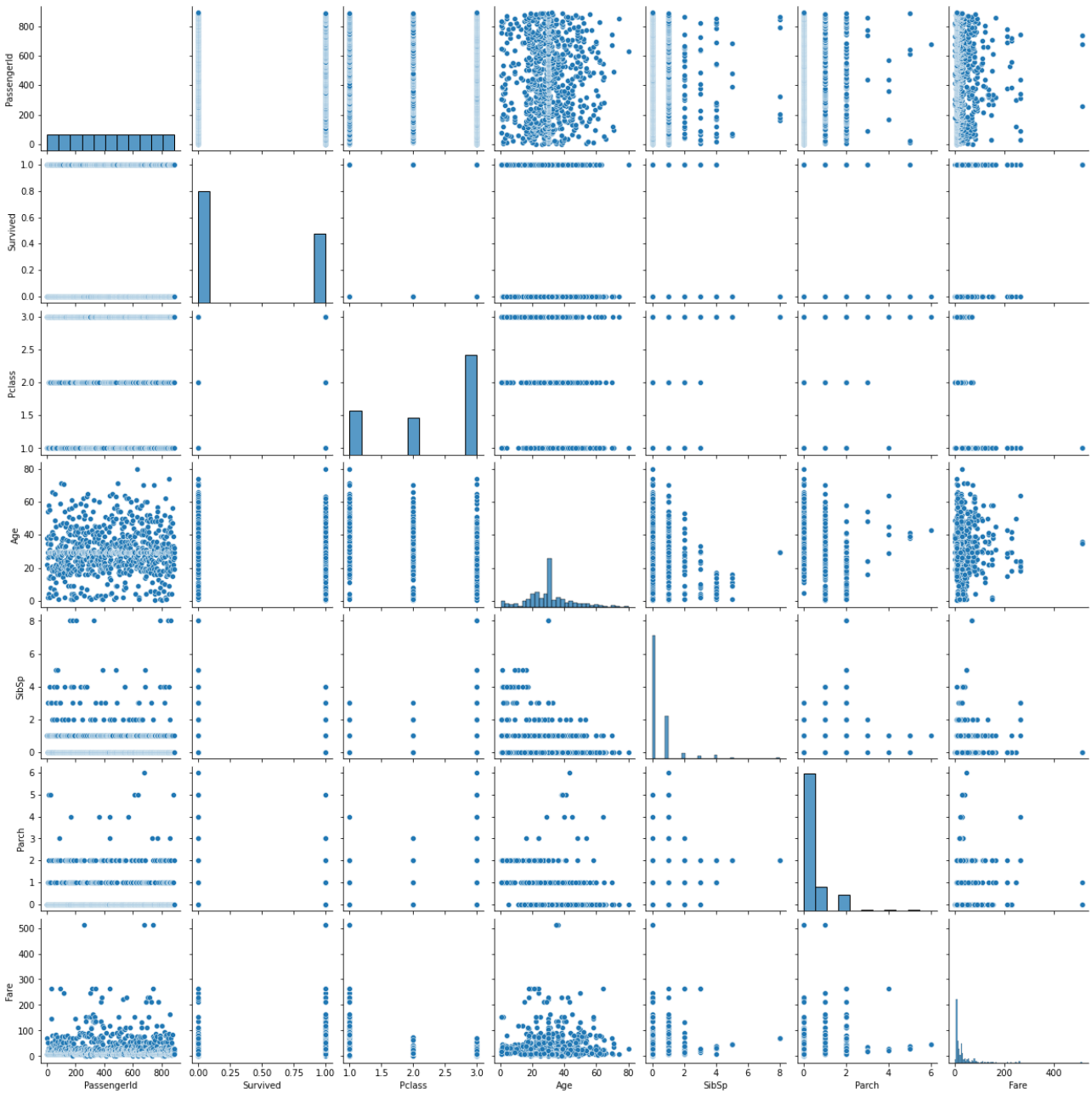
In [37]:
```
sns.displot(x ='Age',kde=True,bins = 5 ,
hue = df['Survived'] , palette = 'Set3', data=df)
```

Out[37]: <seaborn.axisgrid.FacetGrid at 0x7f7f0510e6d0>



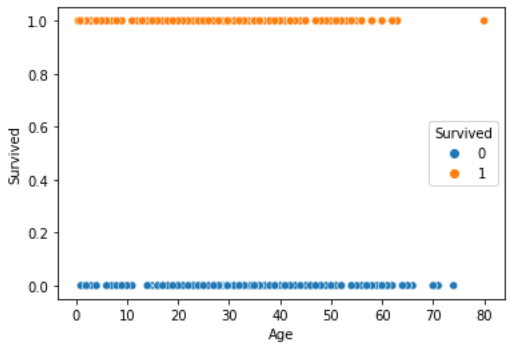
In [38]:
```
sns.pairplot(df)
```

Out[38]:
```
<seaborn.axisgrid.PairGrid at 0x7f7f05e28700>
```



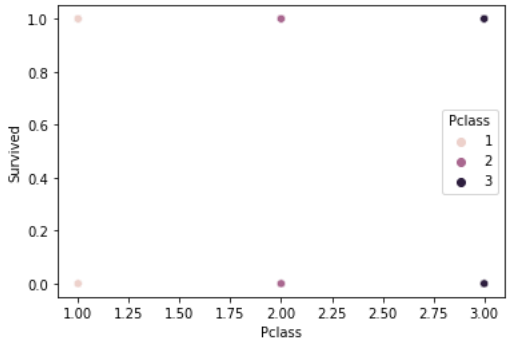
In [40]:
```
sns.scatterplot(x='Age', y ='Survived' ,
data = df , hue = 'Survived')
```

Out[40]:
```
<AxesSubplot:xlabel='Age', ylabel='Survived'>
```



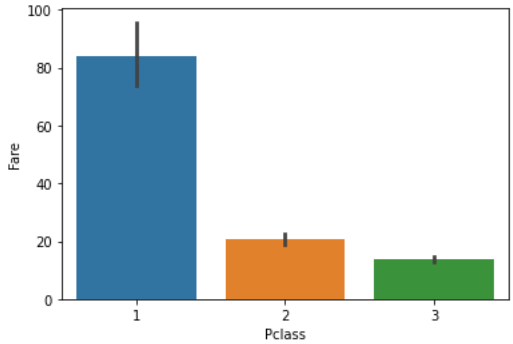
In [43]:
```
sns.scatterplot(x='Pclass', y ='Survived' ,
data = df , hue = 'Pclass')
```

Out[43]: <AxesSubplot:xlabel='Pclass', ylabel='Survived'>



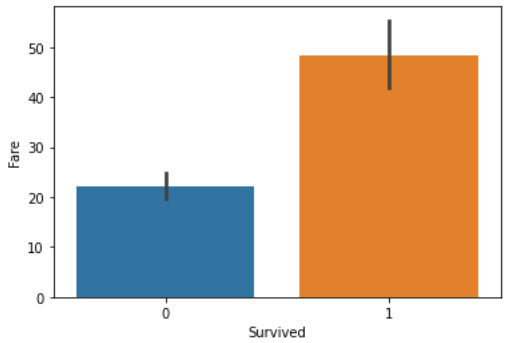
In [45]:
```
sns.barplot(y=df["Fare"],x=df["Pclass"],data=df)
```

Out[45]: <AxesSubplot:xlabel='Pclass', ylabel='Fare'>



In [46]:
```
sns.barplot(y=df["Fare"],x=df["Survived"],data=df)
```

Out[46]: <AxesSubplot:xlabel='Survived', ylabel='Fare'>



In [ ]: