

```
In [1]: import pandas as pd
import numpy as np
import seaborn as sns
```

```
In [2]: import matplotlib.pyplot as plt
```

```
In [21]: fd=pd.read_csv("Titanic")
fd
```

```
Out[21]:
```

	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare
0	1	0	3	Braund, Mr. Owen Harris	male	22.0	1	0	A/5 21171	7.2500
1	2	1	1	Cumings, Mrs. John Bradley (Florence Briggs Th...	female	38.0	1	0	PC 17599	71.2833
2	3	1	3	Heikkinen, Miss. Laina	female	26.0	0	0	STON/O2. 3101282	7.9250
3	4	1	1	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35.0	1	0	113803	53.1000
4	5	0	3	Allen, Mr. William Henry	male	35.0	0	0	373450	8.0500
...
886	887	0	2	Montvila, Rev. Juozas	male	27.0	0	0	211536	13.0000
887	888	1	1	Graham, Miss. Margaret Edith	female	19.0	0	0	112053	30.0000
888	889	0	3	Johnston, Miss. Catherine Helen "Carrie"	female	NaN	1	2	W./C. 6607	23.4500
889	890	1	1	Behr, Mr. Karl Howell	male	26.0	0	0	111369	30.0000
890	891	0	3	Dooley, Mr. Patrick	male	32.0	0	0	370376	7.7500

891 rows × 12 columns

In [22]: *##top 5 fields*
fd.head()

Out[22]:

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

In [5]: *##Getting the particular record*
fd.drop(["PassengerId", "Name", "Ticket"], axis=1, inplace=True)

In []:

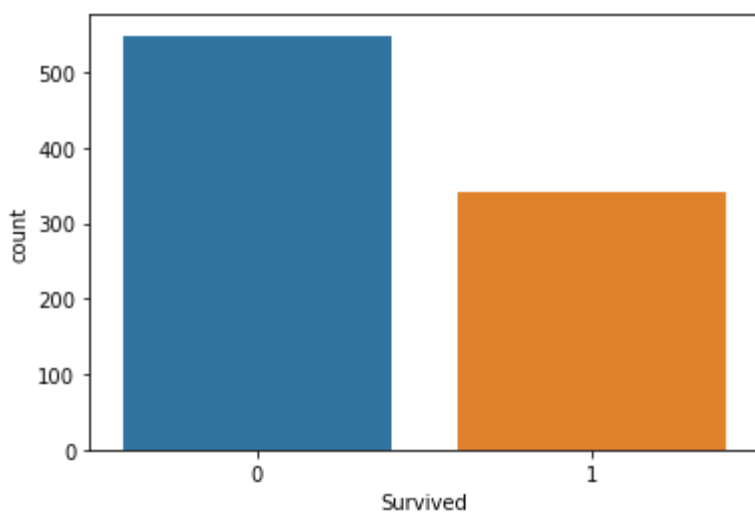
In [6]: fd.head()

Out[6]:

	Survived	Pclass	Sex	Age	SibSp	Parch	Fare	Cabin	Embarked
0	0	3	male	22.0	1	0	7.2500	NaN	S
1	1	1	female	38.0	1	0	71.2833	C85	C
2	1	3	female	26.0	0	0	7.9250	NaN	S
3	1	1	female	35.0	1	0	53.1000	C123	S
4	0	3	male	35.0	0	0	8.0500	NaN	S

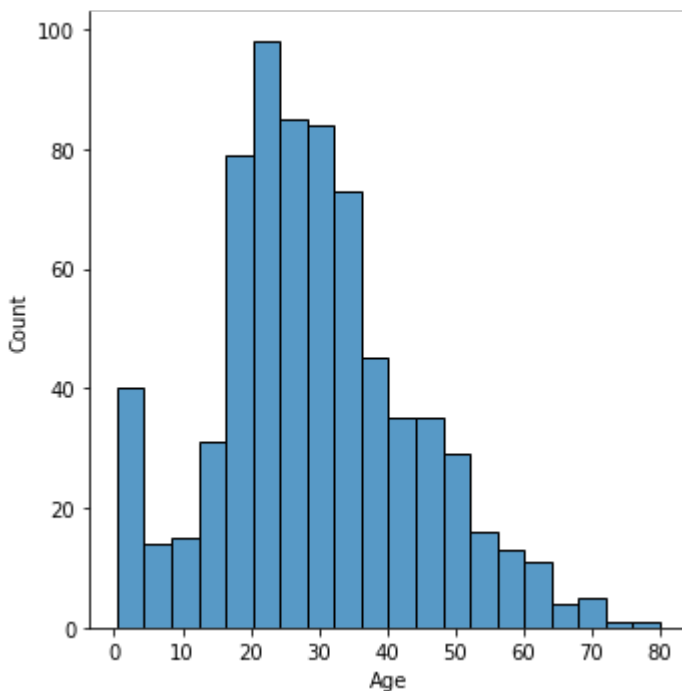
```
In [7]: ##countplot
sns.countplot(x="Survived",data=fd)
fd["Survived"].value_counts()
fd["Sex"].value_counts()
```

```
Out[7]: male      577
female    314
Name: Sex, dtype: int64
```



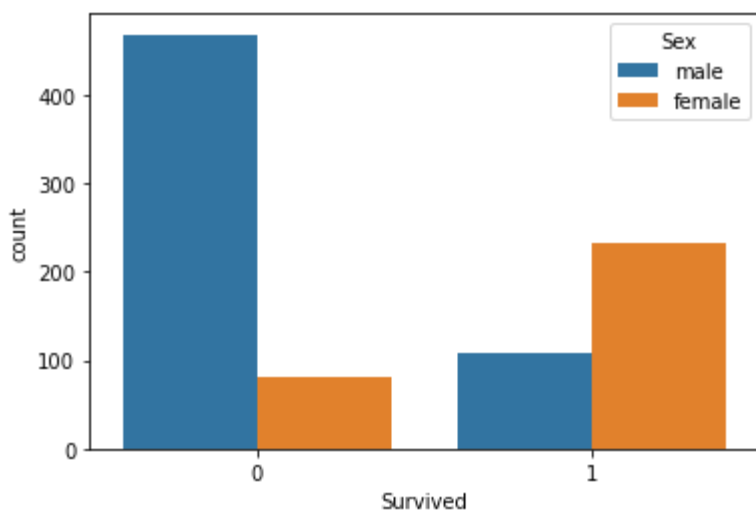
```
In [8]: ## Displot
sns.displot(fd.Age)
```

```
Out[8]: <seaborn.axisgrid.FacetGrid at 0x1edf8b3feb0>
```



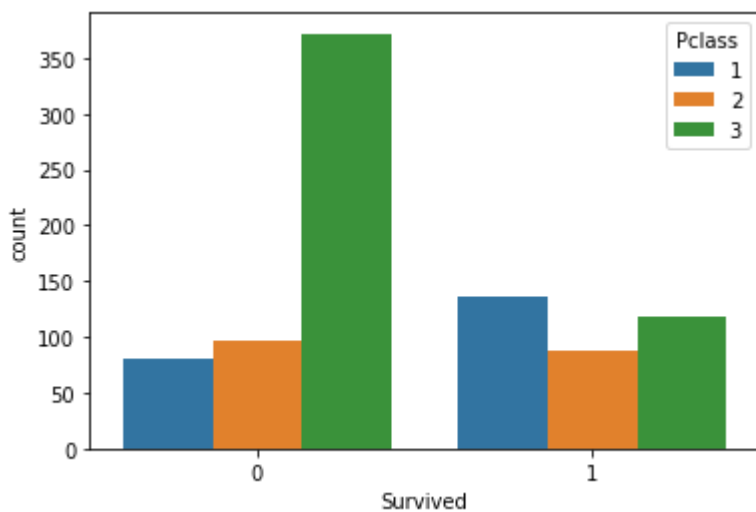
```
In [9]: ##count plot by parameters  
sns.countplot(x="Survived",hue="Sex",data=fd)
```

Out[9]: <AxesSubplot:xlabel='Survived', ylabel='count'>



```
In [10]: ##count plot by parameters  
sns.countplot(x="Survived",hue="Pclass",data=fd)
```

Out[10]: <AxesSubplot:xlabel='Survived', ylabel='count'>



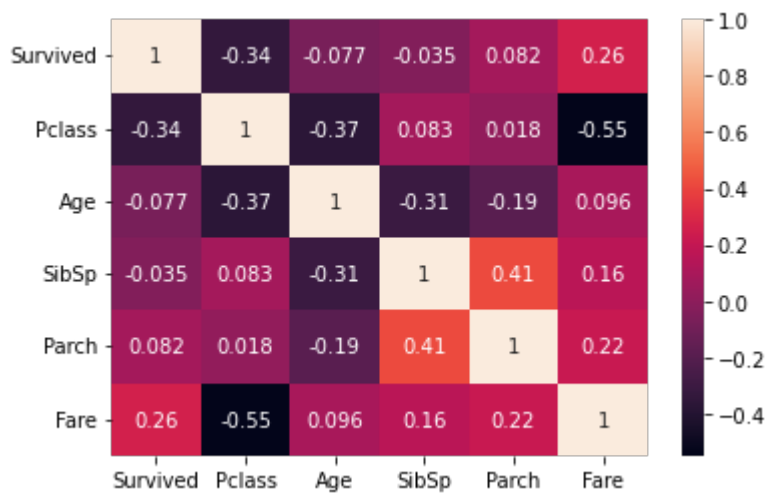
```
In [11]: ## find the correlation
correlation=fd.corr()
correlation
```

```
Out[11]:
```

	Survived	Pclass	Age	SibSp	Parch	Fare
Survived	1.000000	-0.338481	-0.077221	-0.035322	0.081629	0.257307
Pclass	-0.338481	1.000000	-0.369226	0.083081	0.018443	-0.549500
Age	-0.077221	-0.369226	1.000000	-0.308247	-0.189119	0.096067
SibSp	-0.035322	0.083081	-0.308247	1.000000	0.414838	0.159651
Parch	0.081629	0.018443	-0.189119	0.414838	1.000000	0.216225
Fare	0.257307	-0.549500	0.096067	0.159651	0.216225	1.000000

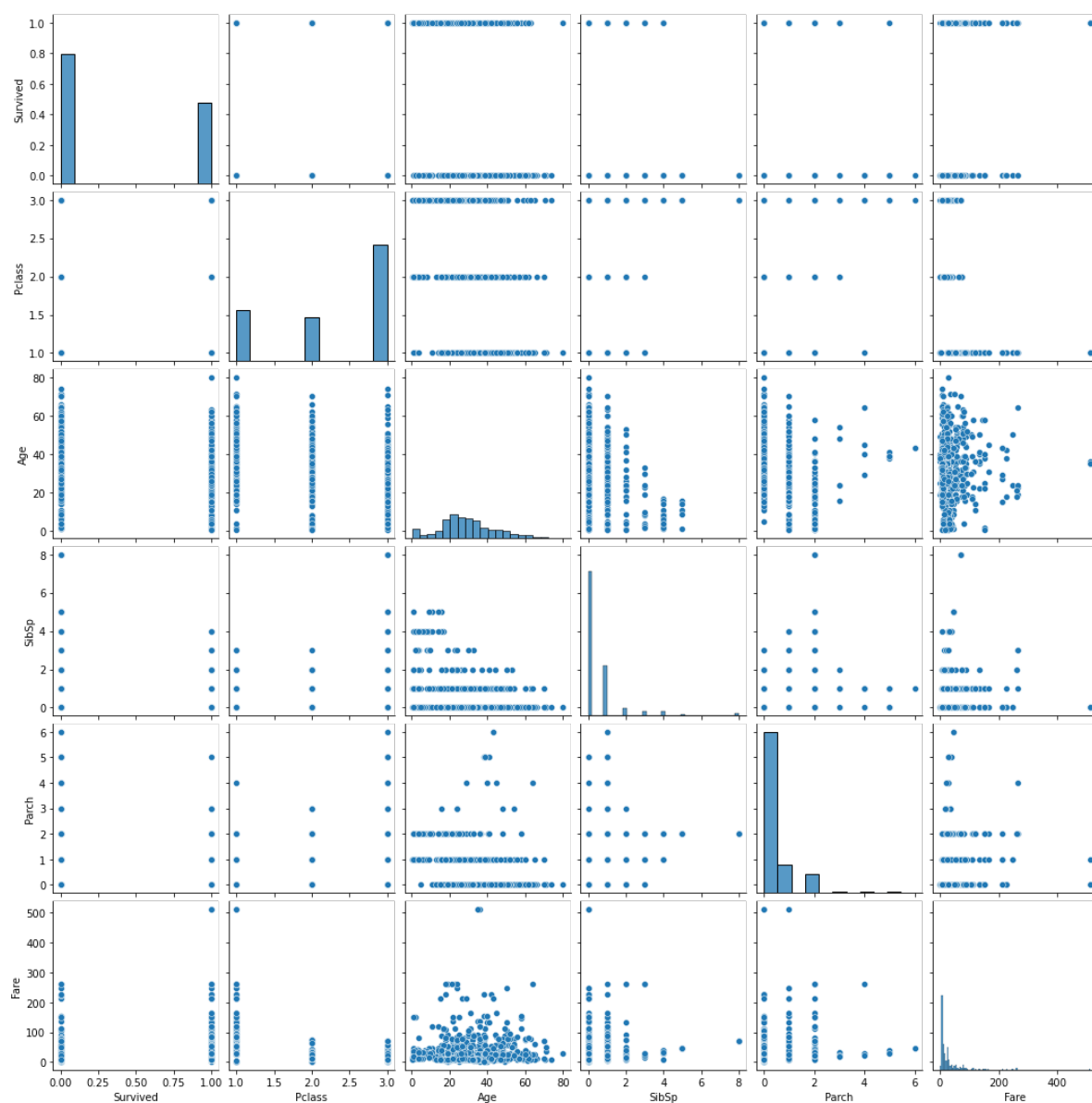
```
In [62]: ## heatmap
sns.heatmap(correlation,annot=True)
```

```
Out[62]: <AxesSubplot:>
```



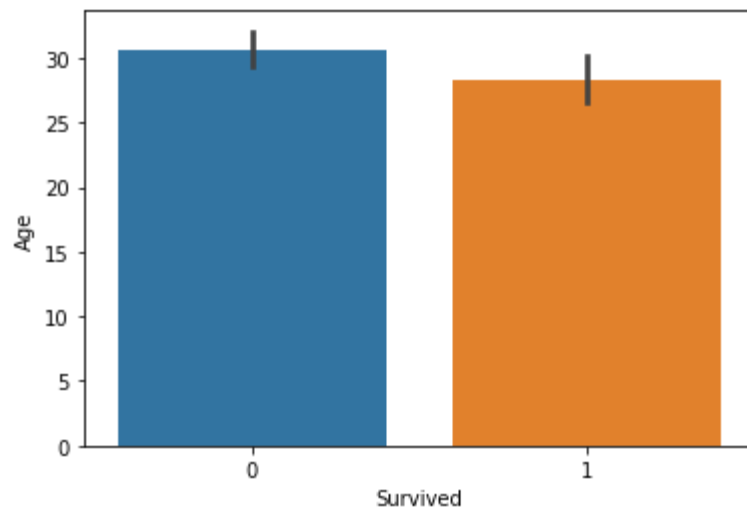
```
In [12]: ## pairplot
sns.pairplot(fd)
```

```
Out[12]: <seaborn.axisgrid.PairGrid at 0x1edf8c753a0>
```



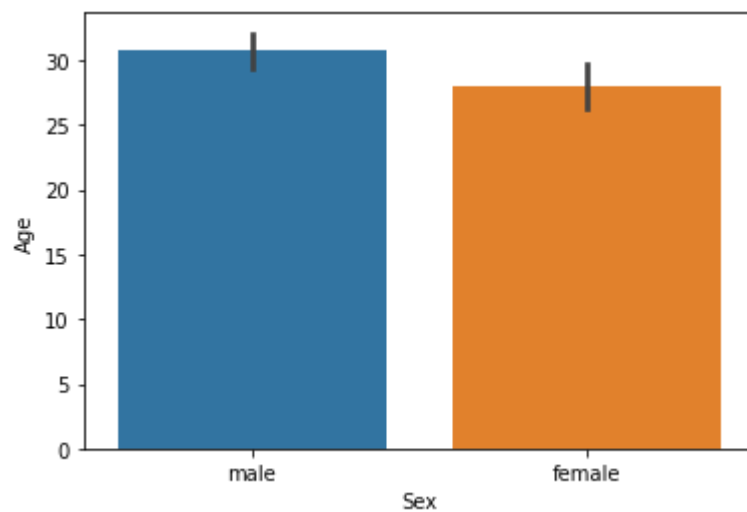
```
In [13]: ##BarPlot  
sns.barplot(x="Survived",y="Age",data=fd)
```

```
Out[13]: <AxesSubplot:xlabel='Survived', ylabel='Age'>
```



```
In [69]: sns.barplot(x="Sex",y="Age",data=fd)
```

```
Out[69]: <AxesSubplot:xlabel='Sex', ylabel='Age'>
```



```
In [14]: ##Facetgrid  
f=sns.FacetGrid(fd,col="Survived")  
f.map(plt.hist,"Age")
```

Out[14]: <seaborn.axisgrid.FacetGrid at 0x1edfb1440a0>

