In [3]:
```
import seaborn as sns
import matplotlib.pyplot as plt
import pandas as pd
```

In [4]:
```
df=sns.load_dataset('titanic')
```

In [5]:
```
df
```

Out[5]:

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	deck	embark_town	alive	alone
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True	NaN	Southampton	no	False
1	1	1	female	38.0	1	0	71.2833	C	First	woman	False	C	Cherbourg	yes	False
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	False	NaN	Southampton	yes	True
3	1	1	female	35.0	1	0	53.1000	S	First	woman	False	C	Southampton	yes	False
4	0	3	male	35.0	0	0	8.0500	S	Third	man	True	NaN	Southampton	no	True
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
886	0	2	male	27.0	0	0	13.0000	S	Second	man	True	NaN	Southampton	no	True
887	1	1	female	19.0	0	0	30.0000	S	First	woman	False	B	Southampton	yes	True
888	0	3	female	NaN	1	2	23.4500	S	Third	woman	False	NaN	Southampton	no	False
889	1	1	male	26.0	0	0	30.0000	C	First	man	True	C	Cherbourg	yes	True
890	0	3	male	32.0	0	0	7.7500	Q	Third	man	True	NaN	Queenstown	no	True

891 rows × 15 columns

In [6]:
```
df.head()
```

Out[6]:

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	deck	embark_town	alive	alone
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True	NaN	Southampton	no	False
1	1	1	female	38.0	1	0	71.2833	C	First	woman	False	C	Cherbourg	yes	False
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	False	NaN	Southampton	yes	True
3	1	1	female	35.0	1	0	53.1000	S	First	woman	False	C	Southampton	yes	False
4	0	3	male	35.0	0	0	8.0500	S	Third	man	True	NaN	Southampton	no	True

In [7]:
```
df.isnull().sum()
```

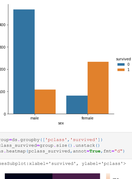
Out[7]:
```
survived       0
pclass         0
sex            0
age          177
sibsp          0
parch          0
fare           0
embarked       2
class          0
who            0
adult_male     0
deck         688
embark_town    2
alive          0
alone          0
dtype: int64
```

In [8]:
```
sns.catplot(x="sex",hue="survived",kind="count",data=df)
```

Out[8]:
```
<seaborn.axisgrid.FacetGrid at 0x28d75647ff2>
```

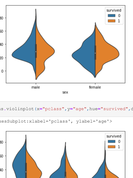
In [9]:
```
sns.catplot(x="sex",hue="survived",kind="count",data=df)
```

Out[9]:
```
<seaborn.axisgrid.FacetGrid at 0x28d7643019>
```



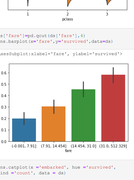
In [10]:
```
group=df.groupby(['pclass','survived'])
pclass_survived=group.size().unstack()
sns.heatmap(pclass_survived,annot=True,fmt="d")
```

Out[10]:
```
<AxesSubplot:xlabel='survived', ylabel='pclass'>
```



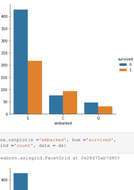
In [11]:
```
sns.violinplot(x="sex",y="age",hue="survived",data=df,split=True)
```

Out[11]:
```
<AxesSubplot:xlabel='sex', ylabel='age'>
```



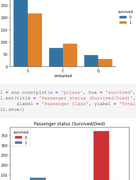
In [12]:
```
sns.violinplot(x="pclass",y="age",hue="survived",data=df,split=True)
```

Out[12]:
```
<AxesSubplot:xlabel='pclass', ylabel='age'>
```



In [13]:
```
df['fare'].replace(df['fare'],0)
sns.barplot(x='fare',y='survived',data=df)
```

Out[13]:
```
<AxesSubplot:xlabel='fare', ylabel='survived'>
```



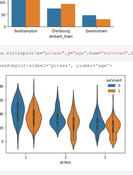
In [14]:
```
sns.catplot(x ='embarked', hue ='survived',
kind ='count', data = df)
```

Out[14]:
```
<seaborn.axisgrid.FacetGrid at 0x28d75bc49d0>
```

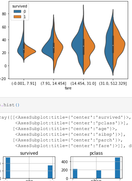
In [15]:
```
sns.catplot(x ='embarked', hue ='survived',
kind ='count', data = df)
```

Out[15]:
```
<seaborn.axisgrid.FacetGrid at 0x28d75eb7d90>
```

In [16]:
```
al = sns.countplot(x ='pclass', hue ='survived', palette = 'Dell', data = df)
al.set(title = 'Passenger status (Survived/Died)',
       xlabel = 'Passenger Class', ylabel = 'Total')
plt.show()
```



In [19]:
```
ax = sns.countplot(x ='sex', hue ='survived', palette = 'Dell', data = df)
ax.set(title = 'Passenger status (Survived/Died)',
       xlabel = 'sex', ylabel = 'Total')
plt.show()
```



In [18]:
```
ax = sns.countplot(x ='class', hue ='survived', palette = 'Dell', data = df)
ax.set(title = 'Passenger status (Survived/Died)',
       xlabel = 'class', ylabel = 'Total')
plt.show()
```


In [21]:
```
sns.catplot(x ='embark_town', hue ='survived',
kind ='count', data = df)
```

Out[21]:
```
<seaborn.axisgrid.FacetGrid at 0x28d75b5f3d0>
```

In [22]:
```
sns.violinplot(x="pclass",y="age",hue="survived",data=df,split=False)
```

Out[22]:
```
<AxesSubplot:xlabel='pclass', ylabel='age'>
```


In [24]:
```
sns.violinplot(x="fare",y="age",hue="survived",data=df,split=True)
```

Out[24]:
```
<AxesSubplot:xlabel='fare', ylabel='age'>
```


In [1]:
```
df.hist()
```

Out[1]:
```
array([[<AxesSubplot:title={'center':'survived'}>,
        <AxesSubplot:title={'center':'pclass'}>],
       [<AxesSubplot:title={'center':'age'}>,
        <AxesSubplot:title={'center':'sibsp'}>],
       [<AxesSubplot:title={'center':'parch'}>,
        <AxesSubplot:title={'center':'fare'}>], dtype=object)
```


In [2]:
```
```