In [53]:
```
import matplotlib.pyplot as plt
import seaborn as sns
import warnings
warnings.filterwarnings('ignore')
```

In [54]:
```
df = sns.load_dataset('titanic')
df
```

Out[54]:

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adu
0	0	3	male	22.0	1	0	7.2500	S	Third	man	
1	1	1	female	38.0	1	0	71.2833	C	First	woman	
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	
3	1	1	female	35.0	1	0	53.1000	S	First	woman	
4	0	3	male	35.0	0	0	8.0500	S	Third	man	
...	...	...	...	...	...	...	...	...	...	...	
886	0	2	male	27.0	0	0	13.0000	S	Second	man	
887	1	1	female	19.0	0	0	30.0000	S	First	woman	
888	0	3	female	NaN	1	2	23.4500	S	Third	woman	
889	1	1	male	26.0	0	0	30.0000	C	First	man	
890	0	3	male	32.0	0	0	7.7500	Q	Third	man	

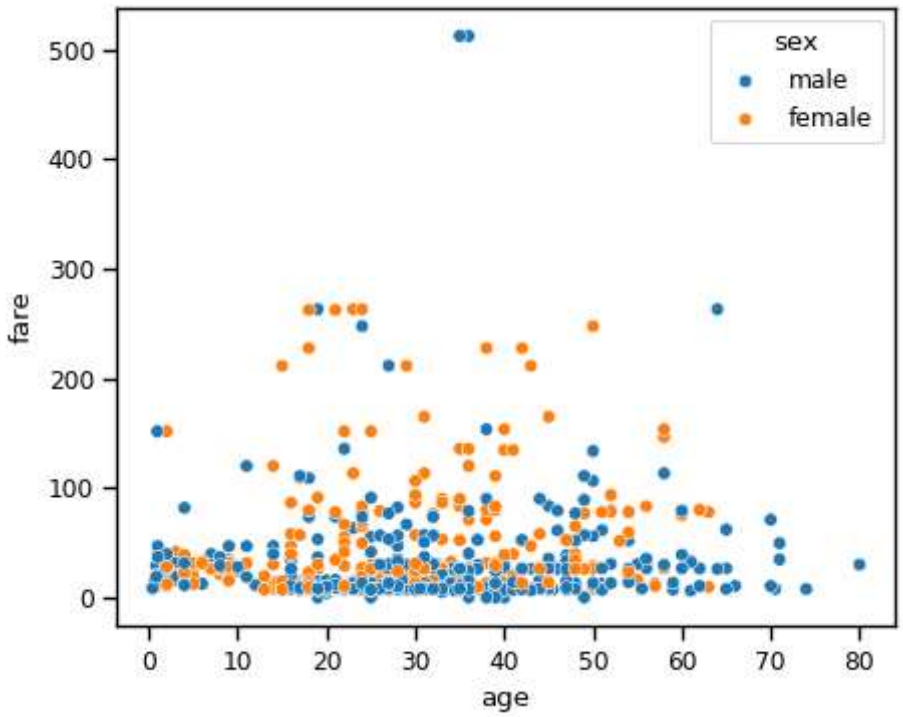
891 rows × 15 columns

In [55]:
```
df.isnull().sum()
```

Out[55]:
```
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
```

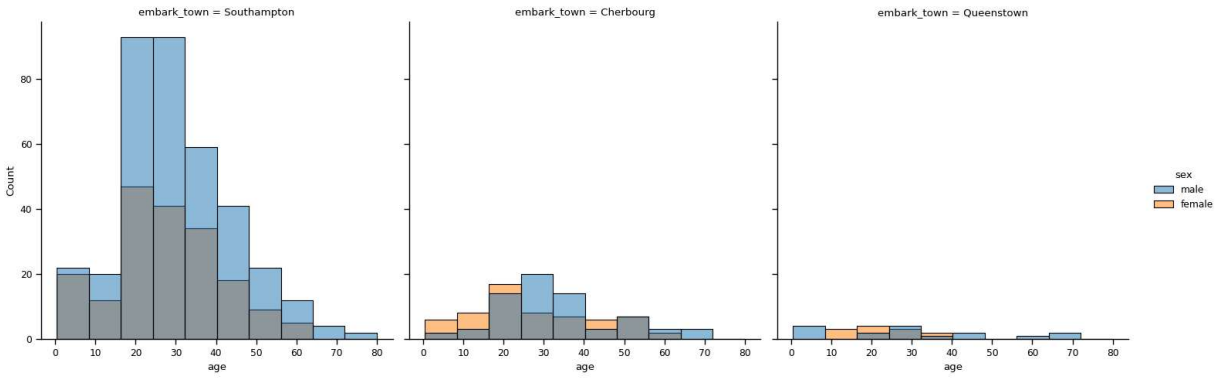
In [56]:
```
plt.figure(figsize=(5,4))
sns.scatterplot(x='age', y='fare', hue='sex', data=df)
```

Out[56]: <Axes: xlabel='age', ylabel='fare'>



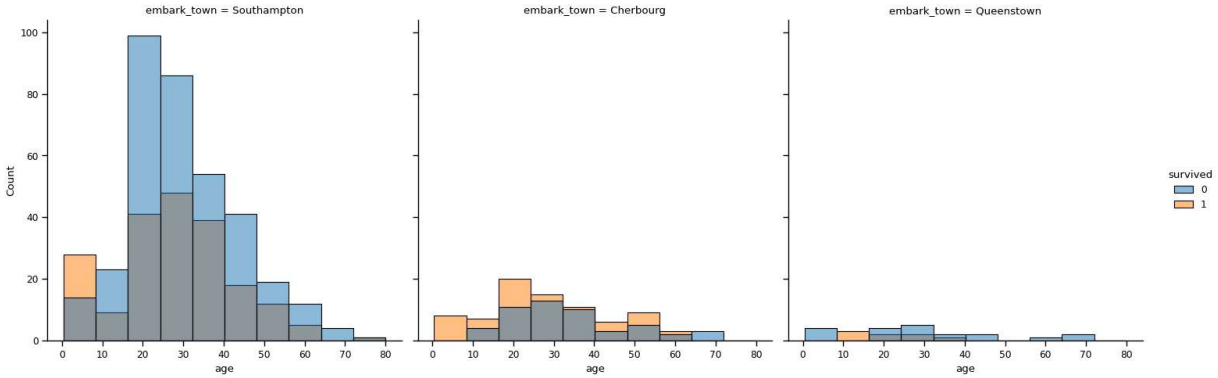
In [57]:
```
sns.displot(data=df, x='age', bins=10, hue='sex', col='embark_town')
```

Out[57]: <seaborn.axisgrid.FacetGrid at 0x25603370ef0>



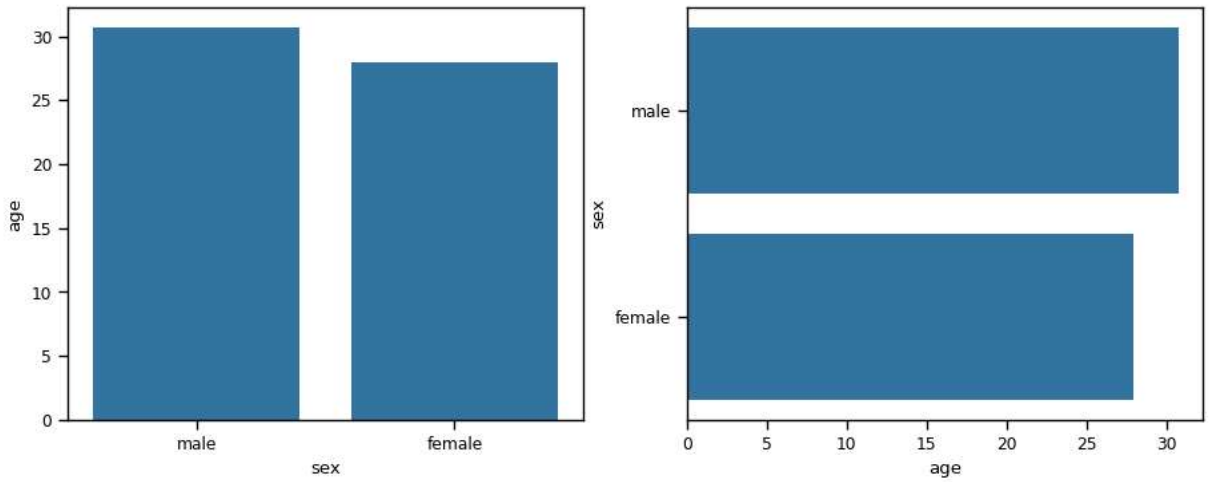
In [58]:
```
sns.displot(data=df, x='age', bins=10, hue='survived', col='embark_town')
```

Out[58]: <seaborn.axisgrid.FacetGrid at 0x25605d96750>



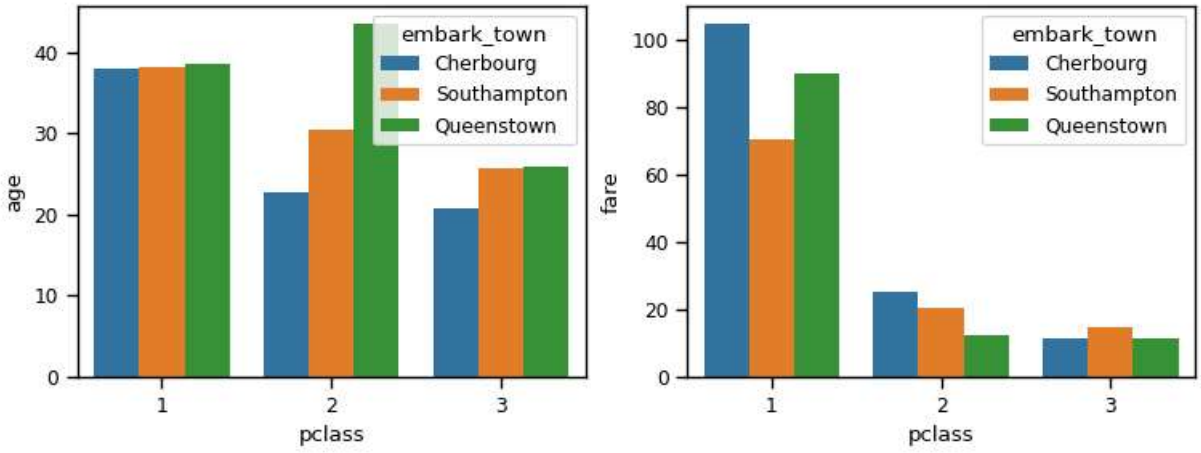
In [59]:
```
plt.figure(figsize=(11,4))

plt.subplot(1,2,1)
sns.barplot(x='sex', y='age', data=df, ci=None)

plt.subplot(1,2,2)
sns.barplot(x='age', y='sex', data=df, ci=None)
```

Out[59]: <Axes: xlabel='age', ylabel='sex'>



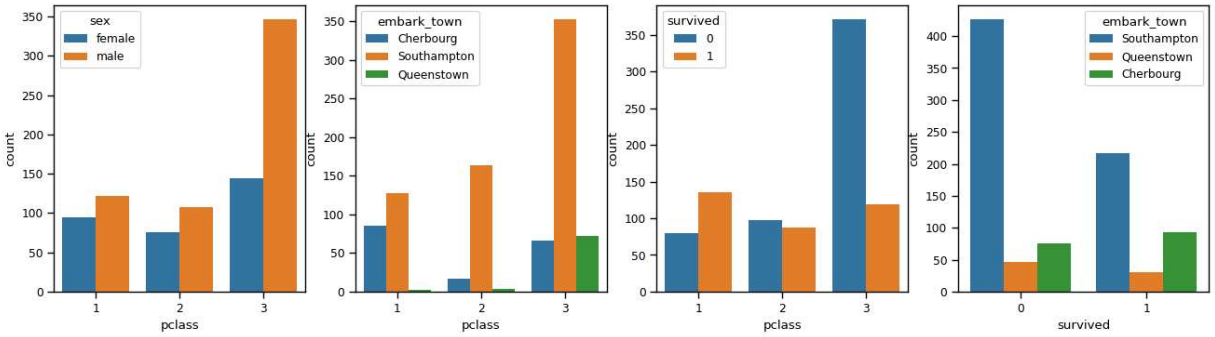
In [60]:
```
plt.figure(figsize=(9,3))

plt.subplot(1,2,1)
sns.barplot(x='pclass', y='age', hue='embark_town', data=df, ci=None)

plt.subplot(1,2,2)
sns.barplot(x='pclass', y='fare', hue='embark_town', data=df, ci=None)
```

Out[60]: <Axes: xlabel='pclass', ylabel='fare'>



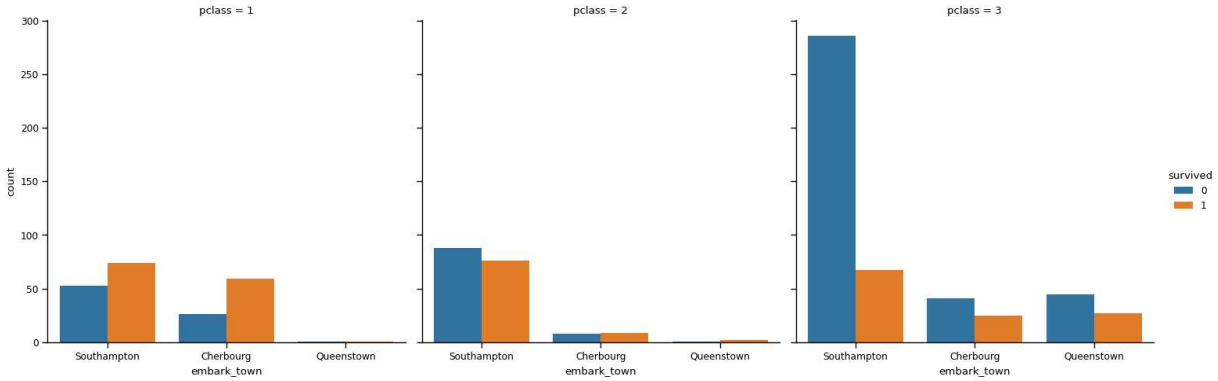
In [61]:
```
plt.figure(figsize=(16,4))

plt.subplot(1,4,1)
sns.countplot(x='pclass', data=df, hue='sex')

plt.subplot(1,4,2)
sns.countplot(x='pclass', data=df, hue='embark_town')

plt.subplot(1,4,3)
sns.countplot(x='pclass', data=df, hue='survived')

plt.subplot(1,4,4)
sns.countplot(x='survived', data=df, hue='embark_town')
```

Out[61]: <Axes: xlabel='survived', ylabel='count'>



In [62]:
```
sns.catplot(x='embark_town', kind='count', data=df, hue='survived', col='pclass')
```

Out[62]: <seaborn.axisgrid.FacetGrid at 0x25606eb8200>


pclass = 1
pclass = 2
pclass = 3
count
300
250
200
150
100
50
0
Southampton
Cherbourg
Queenstown
embark_town
survived
0
1