import seaborn as sns

df=sns.load_dataset('titanic')
df

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

891 rows × 15 columns

df.isnull().sum()

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	

df.drop('deck',inplace=True,axis = 1)
df

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	embark_
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True	Southar
1	1	1	female	38.0	1	0	71.2833	С	First	woman	False	Cherk
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	False	Southan
3	1	1	famala	35 N	1	Λ	53 1000	9	Firet	woman	False	Southan

df.dropna(subset=['age'],inplace=True)

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	embark_
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True	Southarr
1	1	1	female	38.0	1	0	71.2833	С	First	woman	False	Cherb
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	False	Southarr
3	1	1	female	35.0	1	0	53.1000	S	First	woman	False	Southarr
4	0	3	male	35.0	0	0	8.0500	S	Third	man	True	Southarr
885	0	3	female	39.0	0	5	29.1250	Q	Third	woman	False	Queens
886	0	2	male	27.0	0	0	13.0000	S	Second	man	True	Southarr
887	1	1	female	19.0	0	0	30.0000	S	First	woman	False	Southarr
889	1	1	male	26.0	0	0	30.0000	С	First	man	True	Cherb
890	0	3	male	32.0	0	0	7.7500	Q	Third	man	True	Queens

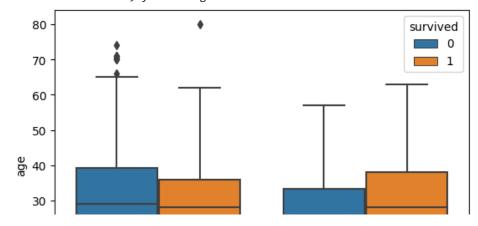
714 rows × 14 columns

df.describe()

	survived	pclass	age	sibsp	parch	
count	714.000000	714.000000	714.000000	714.000000	714.000000	7
mean	0.406162	2.236695	29.699118	0.512605	0.431373	
std	0.491460	0.838250	14.526497	0.929783	0.853289	
min	0.000000	1.000000	0.420000	0.000000	0.000000	
25%	0.000000	1.000000	20.125000	0.000000	0.000000	
50%	0.000000	2.000000	28.000000	0.000000	0.000000	
75%	1.000000	3.000000	38.000000	1.000000	1.000000	
max	1.000000	3.000000	80.000000	5.000000	6.000000	5

sns.boxplot(x='sex',y='age',data=df,hue='survived')

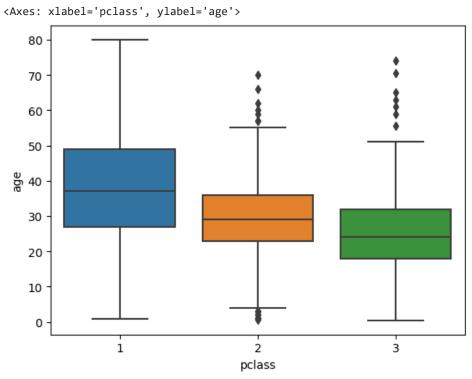
<Axes: xlabel='sex', ylabel='age'>



→ Inference

graph dekh ke jo samjha wo likhna hota hai

υŢ sns.boxplot(x='pclass',y='age',data=df)



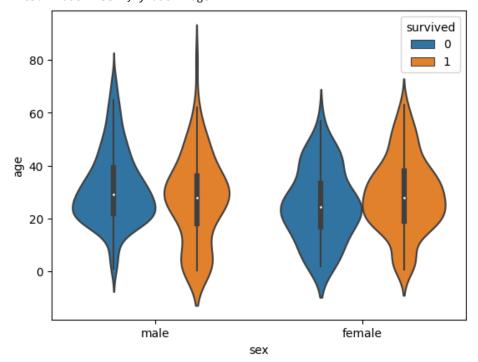
sns.violinplot(x='sex',y='age',data=df)

<Axes: xlabel='sex', ylabel='age'>



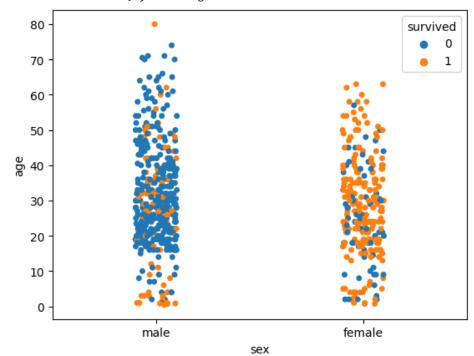
sns.violinplot(x='sex',y='age',data=df,hue='survived')

<Axes: xlabel='sex', ylabel='age'>



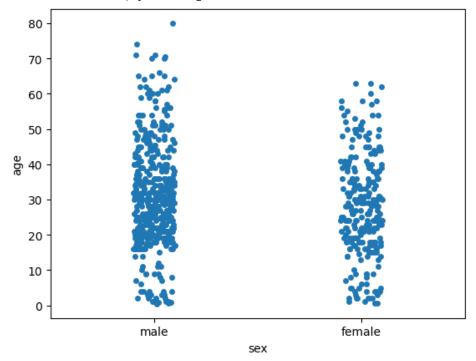
sns.stripplot(x='sex',y='age',data=df,hue='survived')

<Axes: xlabel='sex', ylabel='age'>

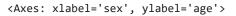


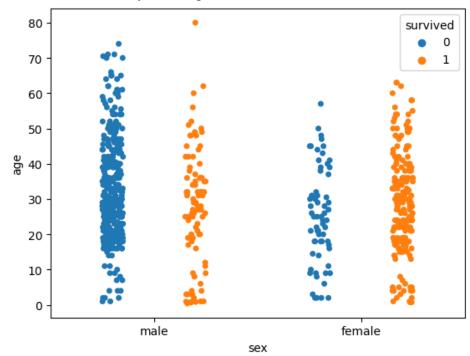
sns.stripplot(x='sex',y='age',data=df)

<Axes: xlabel='sex', ylabel='age'>

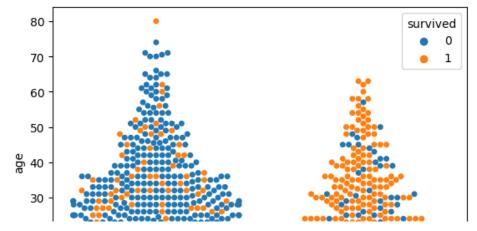


sns.stripplot(x='sex',y='age',data=df,hue='survived',dodge=True)





sns.swarmplot(x='sex',y='age',data=df,hue='survived')



 $\verb|sns.swarmplot(x='sex',y='age',data=df,hue='survived',dodge=True)|\\$

