```
import seaborn as sns
   sns.get_dataset_names()
   ['anagrams',
     'anscombe'
     'attention',
     'brain_networks',
     'car_crashes',
     'diamonds',
     'dots',
     'dowjones',
    'exercise',
     'flights',
    'fmri',
     'geyser',
     'glue',
     'healthexp',
     'iris',
     'mpg',
     'penguins',
     'planets',
     'seaice',
    'taxis',
     'tips',
    'titanic']
   df=sns.load_dataset('titanic')
   df
    Show hidden output
Next steps: ( Generate code with df
                                  New interactive sheet
   df=sns.load_dataset('tips')
   df
         total_bill tip
                           sex smoker day time size
                                                              \blacksquare
     0
             16.99 1.01 Female
                                      No Sun Dinner
                                                          2
                                                              ılı.
     1
              10.34 1.66
                                      No Sun Dinner
                                                          3
                            Male
                                                              1
     2
              21.01 3.50
                            Male
                                      No
                                          Sun Dinner
                                                          3
     3
             23.68 3.31
                                                          2
                            Male
                                      Nο
                                          Sun Dinner
     4
              24.59 3.61 Female
                                      No Sun Dinner
                                                          4
    239
              29.03 5.92
                            Male
                                      No Sat Dinner
                                                          3
    240
              27.18 2.00 Female
                                     Yes Sat Dinner
                                                          2
              22.67 2.00 Male
                                     Yes Sat Dinner
                                                          2
    241
    242
              17.82 1.75
                           Male
                                      No
                                           Sat Dinner
                                                          2
    243
              18.78 3.00 Female
                                      No Thur Dinner
                                                          2
   244 rows × 7 columns
Next steps: ( Generate code with df ) ( New interactive sheet
   df=sns.load_dataset('titanic')
   df
```

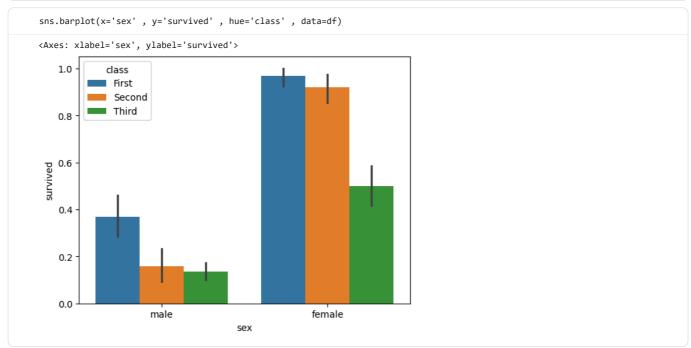
0		pclass			sibsp			embarked	class				embark_town		
	0	3		22.0	1	0	7.2500	S	Third	man	True	NaN			
1	1		female	38.0	1		71.2833	С		woman	False	С	Cherbourg	-	
2	1	3	female	26.0	0	0	7.9250	S		woman	False		Southampton	•	
3	1	1		35.0	1	0	53.1000	S		woman	False	С	Southampton	-	
4	0	3	male	35.0	0	0	8.0500	S	Third	man	True	NaN	Southampton	n no	
						•••							•••		
886	0	2	male		0	0	13.0000	S	Second	man	True	NaN	Southampton		
887	1	1	female	19.0	0	0	30.0000	S		woman	False	В	Southampton	-	
888	0	3	female	NaN	1	2	23.4500	S	Third	woman	False	NaN	Southampton	n no	F
889	1	1	male	26.0	0	0	30.0000	С	First	man	True	С	Cherbourg	yes yes	
890	0	3	male	32.0	0	0	7.7500	Q	Third	man	True	NaN	Queenstown	n no	
891 ro	ws × 15 col	umns													
impor	: Genera	te code v	with df	New	interac	tive she	et								
df =	sns.load_d	dataset(	("titanio	c")											
print	(df.head()	))													
su 0	rvived po	class 3	sex male 2	age	sibsp 1	parch 0	fare 7.2500		class \ Third						
1	1	1 f	emale 3	88.0	1	0	71.2833	С	First						
2 3	1 1			26.0 85.0	0 1	0 0	7.9250 53.1000		Third First						
1 wor	man man man	True False	C C	thamp herbo	ton urg y	no Fal es Fal	.se								
1 wor 2 wor 3 wor 4 r	man man man man	True False False False	NaN Sou C C NaN Sou	uthamp Cherbo Ithamp Ithamp	ton urg y ton y ton y	no Fal es Fal es Tr es Fal	.se .se ·ue								
1 wor 2 wor 3 wor	man man man man il()	True False False False True	NaN Sou C C NaN Sou C Sou NaN Sou	ithamp Cherbo Ithamp Ithamp	ton urg y ton y ton y	no Fal es Fal es Tr es Fal no Tr	se se rue se rue	nmharked	class	who a	dult male d	ack s	ombark town	alive :	al or
1 woi 2 woi 3 woi 4 i	man man man man il() survived	True False False False True	NaN Sou C C NaN Sou C Sou NaN Sou	ithamp Cherbo ithamp ithamp ithamp age	ton urg y ton y ton y ton y ton	no Fal es Fal es Tr es Fal no Tr	se se rue se rue fare e		<b>class</b>				embark_town Southampton		
1 wor 2 wor 3 wor 4 r	man man man man il()	True False False False True  pclass	NaN Sou C C NaN Sou C Sou NaN Sou	athampi Cherbo Uthampi Uthampi Uthampi age 27.0	ton urg y ton y ton y	no Fal es Fal es Tr es Fal no Tr parch	se se rue se rue		class Second	man		NaN S	embark_town Southampton Southampton	alive a	Tru
1 word 2 word 3 word 4 reference defects 886	man man man mil() survived	True False False False True  pclass 2	NaN Sou C C Sou NaN Sou Sou Sex male	age 27.0	ton urg y ton y ton y ton  sibsp	no Fales Fales Tres Fales Tr	fare e	S S	Second	man voman	True I	NaN S	Southampton Southampton	no yes	Tru
1 word 2 word 3 word 4 reference 4 886 887 888	man	True False False False True  pclass 2 1 3	NaN Sou C C NaN Sou C Sou NaN Sou  sex  male female	age 27.0 NaN	ton urg y ton y ton y ton y ton  sibsp  0 1	no Fales Fales Tres Fales Tr	fare e 13.00 30.00 23.45	S S S	Second First v	man voman voman	True I False False I	NaN S	Southampton Southampton Southampton	no yes no	Tru Tru Fals
1 word 2 word 3 word 4 ref. ta	man man man mil man mil man  il()  survived  0 1	True False False False True  pclass 2	NaN Sou C C Sou NaN Sou  sex male female female male	age 27.0 19.0 NaN 26.0	ton urg y ton y ton y ton y ton  sibsp 0	no Fales Fales Tres Fales Tres Fales Tres Fales Tres Fales Tres Tres Tres Tres Tres Tres Tres Tr	fare e	S S	Second First v	man voman	True I False False I True	NaN S B S NaN S	Southampton Southampton	no yes	Tru Tru Fals
1 word 2 word 3 word 4 reference 4 months 4 mont	man	True False False False True  pclass  2 1 3	NaN Sou C C Sou NaN Sou  sex male female female male	age 27.0 19.0 NaN 26.0	sibsp  0 0 1	no Fales Fales Tres Fales Tres Fales Tres Fales Tres Fales Tres Tres Tres Tres Tres Tres Tres Tr	fare e 13.00 30.00 23.45 30.00	s s s s	First v Third v	man voman voman man	True I False False I True	NaN S B S NaN S	Southampton Southampton Southampton Cherbourg	no yes no yes	Tru Tru Fals
1 word 2 word 3 word 4 reference 4 months 4 mont	man	True False False False True  pclass  2 1 3	NaN Sou C C Sou NaN Sou  sex male female female male	age 27.0 19.0 NaN 26.0	sibsp  0 0 1	no Fales Fales Tres Fales Tres Fales Tres Fales Tres Fales Tres Tres Tres Tres Tres Tres Tres Tr	fare e 13.00 30.00 23.45 30.00	s s s s	First v Third v	man voman voman man	True I False False I True	NaN S B S NaN S	Southampton Southampton Southampton Cherbourg	no yes no yes	Tru Tru Fals
1 word 2 word 3 word 4 reference 4 months 1 word 4 months 1 wo	man man man mil()  survived  0 1 0 1 mple()	True False False False True  pclass  2 1 3 1 3	NaN Sou C C Sou NaN Sou  sex male female female male	age 27.0 19.0 NaN 26.0	sibsp  0 0 1 0	no Fales Fales Tres Fales Tr	fare e 13.00 30.00 23.45 30.00 7.75	S S S S C Q	First v Third v First Third	man woman woman man man	True I False False I True True I	NaN S B S NaN S C	Southampton Southampton Southampton Cherbourg	no yes no yes no	Tru Fals Tru Tru
1 word 2 word 3 word 4 reference 4 months 1 word 4 months 1 wo	man man man mil()  survived  0 1 0 1 mple()	True False False False True  pclass  2 1 3 1 3	NaN Sou C C Sou NaN Sou  sex male female female male	age 27.0 19.0 NaN 26.0 32.0	sibsp  0 0 1 0	no Fales Fales Tres Fales Tres Fales Tres Fales Tres Fales Tres Tres Tres Tres Tres Tres Tres Tr	fare e 13.00 30.00 23.45 30.00 7.75	S S S S C Q	First v Third v First Third	man voman man man adult_ma	True it False it True True it	NaN S NaN S C NaN	Southampton Southampton Cherbourg Queenstown	no yes no yes no	Tru Fals Tru Tru
1 word 2 word 3 word 4 reference 4 months 4 reference 4 months 4 m	man	True False False False True  pclass  2 1 3 1 3	NaN Sou C C NaN Sou C Sou NaN Sou  sex male female female male male	age 27.0 19.0 NaN 26.0 32.0	sibsp  0 1 0 0	no Fales Fales Tres Fales Tr	fare e 13.00 30.00 23.45 30.00 7.75	S S S S C Q	First v Third v First Third	man voman man man adult_ma	True it False it True it True it True it True deck en	NaN S B S NaN S C	Southampton Southampton Cherbourg Queenstown	no yes no yes no	Tru Fals Tru Tru
1 word 2 word 3 word 4 reference 4 months 4 reference 4 months 4 m	man	True False False False True  pclass  2 1 3 1 3	NaN Sou C C NaN Sou C Sou NaN Sou  sex male female female male male	age 27.0 19.0 NaN 26.0 32.0	sibsp  0 1 0 0	no Fales Fales Tres Fales Tres Fales Tres Fales Tres Fales Tres Tres Tres Tres Tres Tres Tres Tr	fare e 13.00 30.00 23.45 30.00 7.75	S S S S C Q	First v Third v First Third	man voman man man adult_ma	True it False it True it True it True it True deck en	NaN S NaN S C NaN	Southampton Southampton Cherbourg Queenstown	no yes no yes no	Tru Fals Tru Tru
1 word 2 word 3 word 4 reference 4 months 1 word 4 reference 4 months 2 word 4 months 2 word 4 word 4 reference 4 months 2 word 4 word 4 reference 4 months 2 word 4 word	man	True False False False True  pclass  2 1 3 1 3	NaN Sou C C NaN Sou C Sou NaN Sou  sex male female female male male	age 27.0 19.0 NaN 26.0 32.0	sibsp  0 1 0 0	no Fales Fales Tres Fales Tres Fales Tres Fales Tres Fales Tres Tres Tres Tres Tres Tres Tres Tr	fare e 13.00 30.00 23.45 30.00 7.75	S S S S C Q	First v Third v First Third	man voman man man adult_ma	True it False it True it True it True it True deck en	NaN S NaN S C NaN	Southampton Southampton Cherbourg Queenstown	no yes no yes no	Tru Fals Tru Tru
1 word 2 word 3 word 4 reference 4 months 1 word 4 reference 4 months 2 word 4	man	True False False False True  pclass 2 1 3 1 3 pclass 3	NaN Sou C C Sou NaN Sou sex male female female male male male	age 27.0 19.0 NaN 26.0 32.0	sibsp  0 1 0 0	no Fales Fales Tres Fales Tres Fales Tres Fales Tres Fales Tres Tres Tres Tres Tres Tres Tres Tr	fare e 13.00 30.00 23.45 30.00 7.75	S S S S C Q	First v Third v First Third	man voman man man adult_ma	True it False it True it True it True it True deck en	NaN S NaN S C NaN	Southampton Southampton Cherbourg Queenstown	no yes no yes no	Tru Fals Tru Tru
1 word 2 word 3 word 4 reference 4 months 1 word 4 reference 4 months 2 word 4	man	True False False False True  pclass 2 1 3 1 3 pclass 3	NaN Sou C C Sou NaN Sou sex male female female male male male	age 27.0 19.0 NaN 26.0 32.0	sibsp  0 1 0 0	no Fales Fales Tres Fales Tres Fales Tres Fales Tres Fales Tres Tres Tres Tres Tres Tres Tres Tr	fare e 13.00 30.00 23.45 30.00 7.75	S S S S C Q	First v Third v First Third	man voman man man adult_ma	True it False it True it True it True it True deck en	NaN S NaN S C NaN	Southampton Southampton Cherbourg Queenstown	no yes no yes no	alor Tru Tru Falsi Tru
1 word 2 word 3 word 4 reference 4 from 5 tart 4 word 2 word 3 word 4 reference 4 from 5 tart 4 word 2 word	man	True False False False True  pclass 2 1 3 1 3 pclass 3	NaN Sou C C Sou NaN Sou  sex  male female female male  male  sex a  male  sex a	age 27.0 19.0 NaN 26.0 32.0  AI.	ton urg y ton y ton y ton y ton  sibsp  0 1 0 0	no Fales Fales Tres Fales Tres Fales Tres Fales Tres Fales Tres Tres Tres Tres Tres Tres Tres Tr	fare e 13.00 30.00 23.45 30.00 7.75	S S S S C Q	First v Third v First Third	man voman man man adult_ma	True it False it True it True it True it True deck en	NaN S NaN S C NaN	Southampton Southampton Cherbourg Queenstown	no yes no yes no	Tru Fals Tru Tru
1 wold 2 wold 3 wold 4 line wold 4 line wold 5 wold	man	True False False False False True  pclass  2 1 3 1 3  pclass 3	NaN Sou C C C NaN Sou Sex male female female male male  sex a male 25	age 27.0 19.0 NaN 26.0 32.0  AI.	ton urg y ton y ton y ton y ton  sibsp  0 1 0 0	no Fales Fales Tres Fales Tres Fales Tres Fales Tres Fales Tres Tres Tres Tres Tres Tres Tres Tr	fare e 13.00 30.00 23.45 30.00 7.75	S S S S C Q	First v Third v First Third	man voman man man adult_ma	True it False it True it True it True it True deck en	NaN S NaN S C NaN	Southampton Southampton Cherbourg Queenstown	no yes no yes no	Tr Tr Fal Tr

```
891 non-null
       survived
                                  int64
       pclass
                   891 non-null
                                  int64
    2
                   891 non-null
                                  object
                   714 non-null
                                  float64
       age
       sibsp
                   891 non-null
                                  int64
       parch
                   891 non-null
                                  int64
    6
                   891 non-null
                                  float64
       fare
       embarked 889 non-null
                                  object
                   891 non-null
       class
                                  category
       who
                   891 non-null
                                  object
    10 adult_male 891 non-null
                                  bool
    11 deck
                   203 non-null
                                  category
    12 embark_town 889 non-null
                                  object
    13 alive
                   891 non-null
                                  object
                   891 non-null
   dtypes: bool(2), category(2), float64(2), int64(4), object(5)
   memory usage: 80.7+ KB
   df['age'].mean()
   np.float64(29.69911764705882)
   df['age'].mode()
       age
    0 24.0
   dtype: float64
   df['age'].median()
   28.0
   df['age']=df['age'].fillna(df['age'].mean())
   df.isnull().sum()
                a
      survived
       pclass
                0
                0
        sex
        age
                0
       sibsp
                0
       parch
        fare
                0
     embarked
                2
       class
                0
                0
        who
     adult_male
    embark_town 2
       alive
                0
       alone
                0
   dtype: int64
   print(df.columns)
   'alone'],
        dtype='object')
   df=df.drop("deck" , axis=1)
    Show hidden output
Next steps: ( Explain error
```

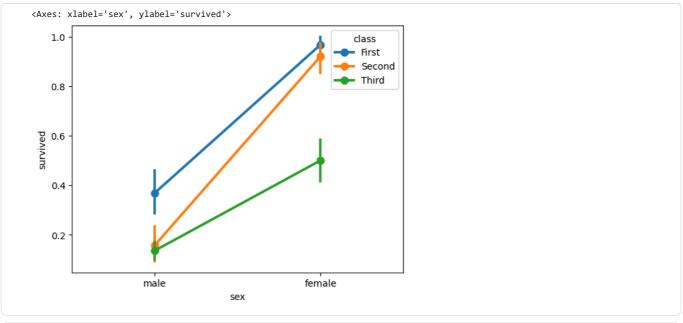
	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	embark_town	alive	al
0	0	3	male	22.000000	1	0	7.2500	S	Third	man	True	Southampton	no	F
1	1	1	female	38.000000	1	0	71.2833	С	First	woman	False	Cherbourg	yes	F
2	1	3	female	26.000000	0	0	7.9250	S	Third	woman	False	Southampton	yes	-
3	1	1	female	35.000000	1	0	53.1000	S	First	woman	False	Southampton	yes	F
4	0	3	male	35.000000	0	0	8.0500	S	Third	man	True	Southampton	no	
886	0	2	male	27.000000	0	0	13.0000	S	Second	man	True	Southampton	no	
887	1	1	female	19.000000	0	0	30.0000	S	First	woman	False	Southampton	yes	
888	0	3	female	29.699118	1	2	23.4500	S	Third	woman	False	Southampton	no	F
889	1	1	male	26.000000	0	0	30.0000	С	First	man	True	Cherbourg	yes	
890	0	3	male	32.000000	0	0	7.7500	Q	Third	man	True	Queenstown	no	

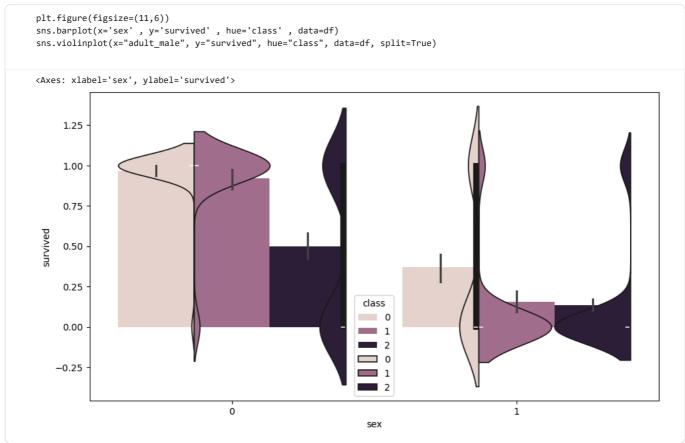
Next steps: Generate code with df New interactive sheet

import matplotlib.pyplot as plt

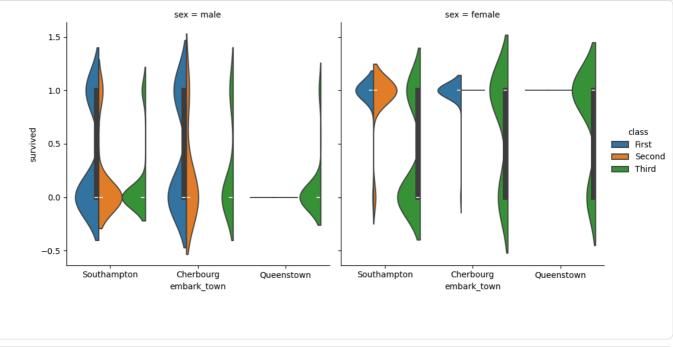


sns.pointplot(x="sex", y="survived", hue="class", data=df)





```
g = sns.catplot(x="embark_town", y="survived", hue="class", col="sex", kind="violin", data=df, split=True)
```

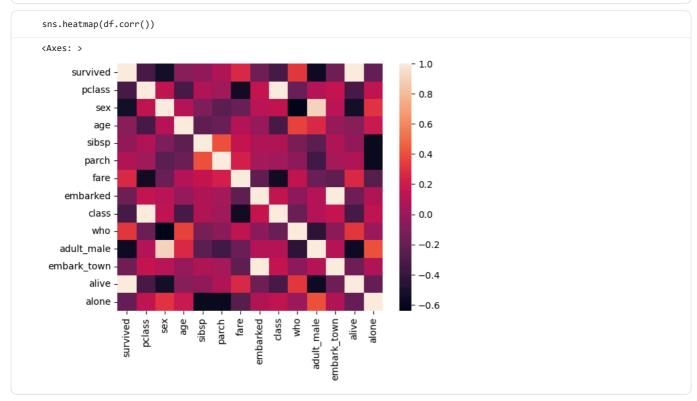


```
from sklearn.preprocessing import LabelEncoder
le=LabelEncoder()
a=['sex' , 'embarked' , 'class' , 'who' , 'adult_male' , 'embark_town' , 'alive' , 'alone']
for i in a:
    df[i]=le.fit_transform(df[i])
```

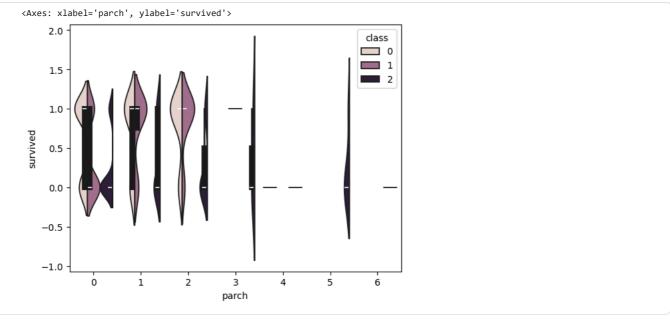
```
df.info()
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 891 entries, 0 to 890
Data columns (total 14 columns):
# Column
                Non-Null Count Dtype
    survived
                 891 non-null
                                 int64
0
1
    pclass
                 891 non-null
                                 int64
                 891 non-null
2
                                 int64
    sex
                                 float64
3
4
                 891 non-null
    age
    sibsp
                 891 non-null
                                 int64
5
    parch
                 891 non-null
                                 int64
6
    fare
                 891 non-null
                                 float64
7
    embarked
                 891 non-null
                                 int64
   class
                 891 non-null
                                 int64
                 891 non-null
                                 int64
    who
10 adult_male
                 891 non-null
                                 int64
11 embark_town 891 non-null
                                 int64
                 891 non-null
12 alive
                                 int64
                 891 non-null
                                 int64
13 alone
dtypes: float64(2), int64(12)
memory usage: 97.6 KB
```

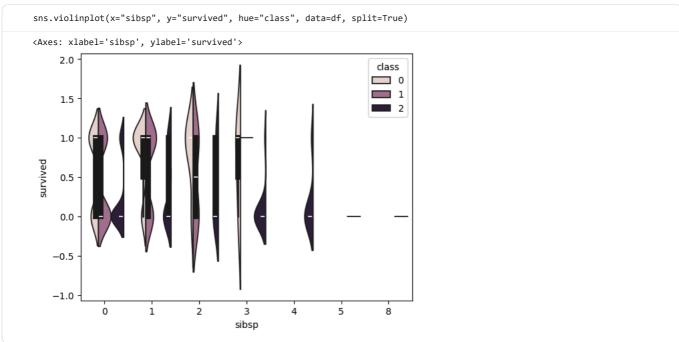
```
df.corr()
```

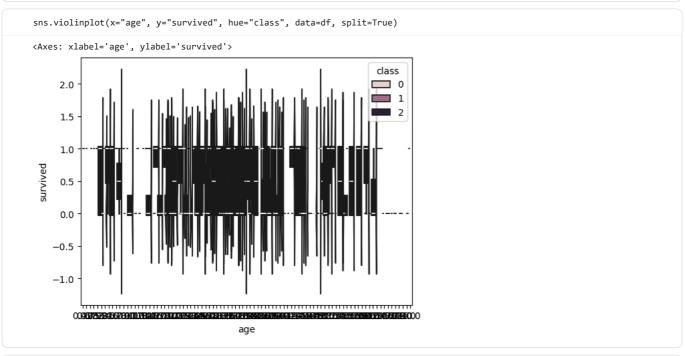
urvived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male
.000000	-0.338481	-0.543351	-0.069809	-0.035322	0.081629	0.257307	-0.163517	-0.338481	0.325753	-0.557080
.338481	1.000000	0.131900	-0.331339	0.083081	0.018443	-0.549500	0.157112	1.000000	-0.196793	0.094035
.543351	0.131900	1.000000	0.084153	-0.114631	-0.245489	-0.182333	0.104057	0.131900	-0.639773	0.908578
.069809	-0.331339	0.084153	1.000000	-0.232625	-0.179191	0.091566	-0.022239	-0.331339	0.354507	0.253236
.035322	0.083081	-0.114631	-0.232625	1.000000	0.414838	0.159651	0.066654	0.083081	-0.136003	-0.253586
.081629	0.018443	-0.245489	-0.179191	0.414838	1.000000	0.216225	0.038322	0.018443	-0.055682	-0.349943
.257307	-0.549500	-0.182333	0.091566	0.159651	0.216225	1.000000	-0.221226	-0.549500	0.146290	-0.182024
.163517	0.157112	0.104057	-0.022239	0.066654	0.038322	-0.221226	1.000000	0.157112	-0.060177	0.088725
.338481	1.000000	0.131900	-0.331339	0.083081	0.018443	-0.549500	0.157112	1.000000	-0.196793	0.094035
.325753	-0.196793	-0.639773	0.354507	-0.136003	-0.055682	0.146290	-0.060177	-0.196793	1.000000	-0.437532
.557080	0.094035	0.908578	0.253236	-0.253586	-0.349943	-0.182024	0.088725	0.094035	-0.437532	1.000000
.163517	0.157112	0.104057	-0.022239	0.066654	0.038322	-0.221226	1.000000	0.157112	-0.060177	0.088725
.000000	-0.338481	-0.543351	-0.069809	-0.035322	0.081629	0.257307	-0.163517	-0.338481	0.325753	-0.557080
.203367	0.135207	0.303646	0.179775	-0.584471	-0.583398	-0.271832	0.065610	0.135207	0.006540	0.404744
	0000000 338481 543351 069809 035322 081629 257307 163517 338481 325753 557080 163517 0000000	000000 -0.338481 338481 1.000000 543351 0.131900 069809 -0.331339 035322 0.083081 081629 0.018443 257307 -0.549500 163517 0.157112 338481 1.000000 325753 -0.196793 557080 0.094035 163517 0.157112 000000 -0.338481	000000       -0.338481       -0.543351         338481       1.000000       0.131900         543351       0.131900       1.000000         069809       -0.331339       0.084153         035322       0.083081       -0.114631         081629       0.018443       -0.245489         257307       -0.549500       -0.182333         163517       0.157112       0.104057         338481       1.000000       0.131900         325753       -0.196793       -0.639773         557080       0.094035       0.908578         163517       0.157112       0.104057         000000       -0.338481       -0.543351	0000000       -0.338481       -0.543351       -0.069809         338481       1.000000       0.131900       -0.331339         543351       0.131900       1.000000       0.084153         069809       -0.331339       0.084153       1.000000         035322       0.083081       -0.114631       -0.232625         081629       0.018443       -0.245489       -0.179191         257307       -0.549500       -0.182333       0.091566         163517       0.157112       0.104057       -0.022239         338481       1.000000       0.131900       -0.331339         325753       -0.196793       -0.639773       0.354507         557080       0.094035       0.908578       0.253236         163517       0.157112       0.104057       -0.022239         000000       -0.338481       -0.543351       -0.069809	0000000         -0.338481         -0.543351         -0.069809         -0.035322           338481         1.000000         0.131900         -0.331339         0.083081           543351         0.131900         1.000000         0.084153         -0.114631           069809         -0.331339         0.084153         1.000000         -0.232625           035322         0.083081         -0.114631         -0.232625         1.000000           081629         0.018443         -0.245489         -0.179191         0.414838           257307         -0.549500         -0.182333         0.091566         0.159651           163517         0.157112         0.104057         -0.022239         0.066654           338481         1.000000         0.131900         -0.331339         0.083081           325753         -0.196793         -0.639773         0.354507         -0.136003           557080         0.094035         0.908578         0.253236         -0.253586           163517         0.157112         0.104057         -0.022239         0.066654           000000         -0.338481         -0.543351         -0.069809         -0.035322	000000         -0.338481         -0.543351         -0.069809         -0.035322         0.081629           338481         1.000000         0.131900         -0.331339         0.083081         0.018443           543351         0.131900         1.000000         0.084153         -0.114631         -0.245489           069809         -0.331339         0.084153         1.000000         -0.232625         -0.179191           035322         0.083081         -0.114631         -0.232625         1.000000         0.414838           081629         0.018443         -0.245489         -0.179191         0.414838         1.000000           257307         -0.549500         -0.182333         0.091566         0.159651         0.216225           163517         0.157112         0.104057         -0.022239         0.066654         0.038322           338481         1.000000         0.131900         -0.331339         0.083081         0.018443           325753         -0.196793         -0.639773         0.354507         -0.136003         -0.055682           557080         0.094035         0.908578         0.253236         -0.253586         -0.349943           163517         0.157112         0.104057         -0.022239	000000         -0.338481         -0.543351         -0.069809         -0.035322         0.081629         0.257307           338481         1.000000         0.131900         -0.331339         0.083081         0.018443         -0.549500           543351         0.131900         1.000000         0.084153         -0.114631         -0.245489         -0.182333           069809         -0.331339         0.084153         1.000000         -0.232625         -0.179191         0.091566           035322         0.083081         -0.114631         -0.232625         1.000000         0.414838         0.159651           081629         0.018443         -0.245489         -0.179191         0.414838         1.000000         0.216225           257307         -0.549500         -0.182333         0.091566         0.159651         0.216225         1.000000           163517         0.157112         0.104057         -0.022239         0.066654         0.038322         -0.221226           338481         1.000000         0.131900         -0.331339         0.083081         0.018443         -0.549500           557080         0.094035         0.908578         0.253236         -0.253586         -0.349943         -0.182024           163517 </th <th>000000         -0.338481         -0.543351         -0.069809         -0.035322         0.081629         0.257307         -0.163517           338481         1.000000         0.131900         -0.331339         0.083081         0.018443         -0.549500         0.157112           543351         0.131900         1.000000         0.084153         -0.114631         -0.245489         -0.182333         0.104057           069809         -0.331339         0.084153         1.000000         -0.232625         -0.179191         0.091566         -0.022239           035322         0.083081         -0.114631         -0.232625         1.000000         0.414838         0.159651         0.066654           081629         0.018443         -0.245489         -0.179191         0.414838         1.000000         0.216225         0.038322           257307         -0.549500         -0.182333         0.091566         0.159651         0.216225         1.000000         -0.221226           163517         0.157112         0.104057         -0.022239         0.066654         0.038322         -0.221226         1.000000           338481         1.000000         0.131900         -0.331339         0.083081         0.018443         -0.549500         0.157112</th> <th>000000         -0.338481         -0.543351         -0.069809         -0.035322         0.081629         0.257307         -0.163517         -0.338481           338481         1.000000         0.131900         -0.331339         0.083081         0.018443         -0.549500         0.157112         1.000000           543351         0.131900         1.000000         0.084153         -0.114631         -0.245489         -0.182333         0.104057         0.131900           069809         -0.331339         0.084153         1.000000         -0.232625         -0.179191         0.091566         -0.022239         -0.331339           035322         0.083081         -0.114631         -0.232625         1.000000         0.414838         0.159651         0.066654         0.083081           081629         0.018443         -0.245489         -0.179191         0.414838         1.000000         0.216225         0.038322         0.018443           257307         -0.549500         -0.182333         0.091566         0.159651         0.216225         1.000000         -0.221226         -0.549500           163517         0.157112         0.104057         -0.022239         0.066654         0.038322         -0.221226         1.000000         0.157112         1.000000</th> <th>000000         -0.338481         -0.543351         -0.069809         -0.035322         0.081629         0.257307         -0.163517         -0.338481         0.325753           338481         1.000000         0.131900         -0.331339         0.083081         0.018443         -0.549500         0.157112         1.000000         -0.196793           543351         0.131900         1.000000         0.084153         -0.114631         -0.245489         -0.182333         0.104057         0.131900         -0.639773           069809         -0.331339         0.084153         1.000000         -0.232625         -0.179191         0.091566         -0.022239         -0.331339         0.354507           035322         0.083081         -0.114631         -0.232625         1.000000         0.414838         0.159651         0.066654         0.083081         -0.136003           081629         0.018443         -0.245489         -0.179191         0.414838         1.000000         0.216225         0.038322         0.018443         -0.055682           257307         -0.549500         -0.182333         0.091566         0.159651         0.216225         1.000000         -0.221226         -0.549500         0.146290           163517         0.157112         0.1040</th>	000000         -0.338481         -0.543351         -0.069809         -0.035322         0.081629         0.257307         -0.163517           338481         1.000000         0.131900         -0.331339         0.083081         0.018443         -0.549500         0.157112           543351         0.131900         1.000000         0.084153         -0.114631         -0.245489         -0.182333         0.104057           069809         -0.331339         0.084153         1.000000         -0.232625         -0.179191         0.091566         -0.022239           035322         0.083081         -0.114631         -0.232625         1.000000         0.414838         0.159651         0.066654           081629         0.018443         -0.245489         -0.179191         0.414838         1.000000         0.216225         0.038322           257307         -0.549500         -0.182333         0.091566         0.159651         0.216225         1.000000         -0.221226           163517         0.157112         0.104057         -0.022239         0.066654         0.038322         -0.221226         1.000000           338481         1.000000         0.131900         -0.331339         0.083081         0.018443         -0.549500         0.157112	000000         -0.338481         -0.543351         -0.069809         -0.035322         0.081629         0.257307         -0.163517         -0.338481           338481         1.000000         0.131900         -0.331339         0.083081         0.018443         -0.549500         0.157112         1.000000           543351         0.131900         1.000000         0.084153         -0.114631         -0.245489         -0.182333         0.104057         0.131900           069809         -0.331339         0.084153         1.000000         -0.232625         -0.179191         0.091566         -0.022239         -0.331339           035322         0.083081         -0.114631         -0.232625         1.000000         0.414838         0.159651         0.066654         0.083081           081629         0.018443         -0.245489         -0.179191         0.414838         1.000000         0.216225         0.038322         0.018443           257307         -0.549500         -0.182333         0.091566         0.159651         0.216225         1.000000         -0.221226         -0.549500           163517         0.157112         0.104057         -0.022239         0.066654         0.038322         -0.221226         1.000000         0.157112         1.000000	000000         -0.338481         -0.543351         -0.069809         -0.035322         0.081629         0.257307         -0.163517         -0.338481         0.325753           338481         1.000000         0.131900         -0.331339         0.083081         0.018443         -0.549500         0.157112         1.000000         -0.196793           543351         0.131900         1.000000         0.084153         -0.114631         -0.245489         -0.182333         0.104057         0.131900         -0.639773           069809         -0.331339         0.084153         1.000000         -0.232625         -0.179191         0.091566         -0.022239         -0.331339         0.354507           035322         0.083081         -0.114631         -0.232625         1.000000         0.414838         0.159651         0.066654         0.083081         -0.136003           081629         0.018443         -0.245489         -0.179191         0.414838         1.000000         0.216225         0.038322         0.018443         -0.055682           257307         -0.549500         -0.182333         0.091566         0.159651         0.216225         1.000000         -0.221226         -0.549500         0.146290           163517         0.157112         0.1040



sns.violinplot(x="parch", y="survived", hue="class", data=df, split=True)







sns.violinplot(x="sex", y="survived", hue="class", data=df, split=True)

