

# TITANIC REPORT





```
1  🐘 Data Wrangling for the Titanic Dataset:
2
3  Data wrangling, also known as data munging,
4  Is the process of cleaning, structuring, and enriching raw data into a desirable format,
5  for better decision making in data analysis and machine learning.
6
7  📊 Data Visualization for the Titanic Dataset:
8
9  In the context of the Titanic dataset, data visualization can be used to:
10 Create various charts 📊
11     1- Generate graphs 📊
12     2- Design plots 📊
13
14 These visualizations help in understanding aspects such as:
15     1- Survival rates 📊
16     2- Passenger demographics 📊
17     3- Relationships between different variables ↔
18
19 Data visualization is crucial for gaining deeper insights and making informed decisions in data analysis.
20
```



```
1  # Plotting in python
2  import pandas as pd
3  import numpy as np
4  import seaborn as sns
5  import matplotlib.pyplot as plt
6
```



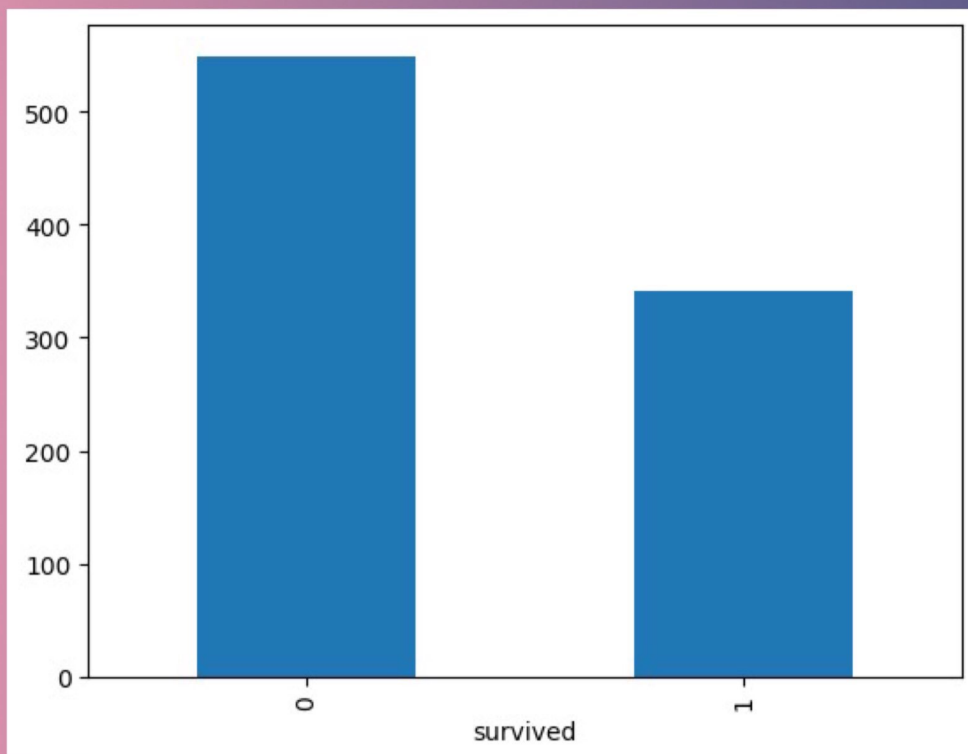
```
1 # import data
2 kashti = sns.load_dataset('titanic')
3 kashti
```

	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

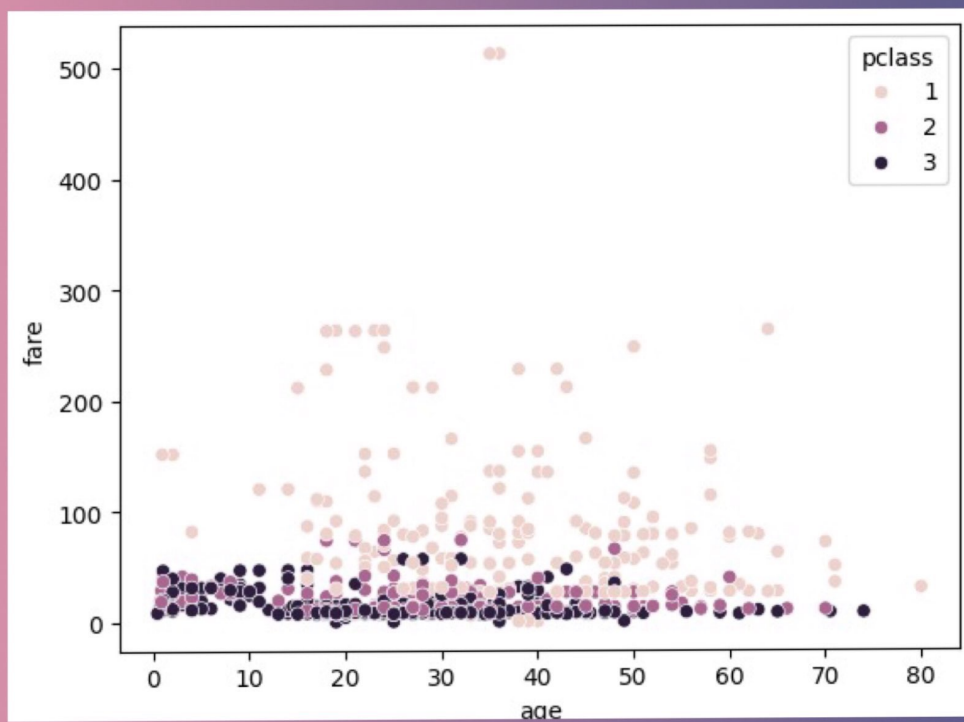


```
1 kashti.survived.value_counts().plot(kind='bar')
```





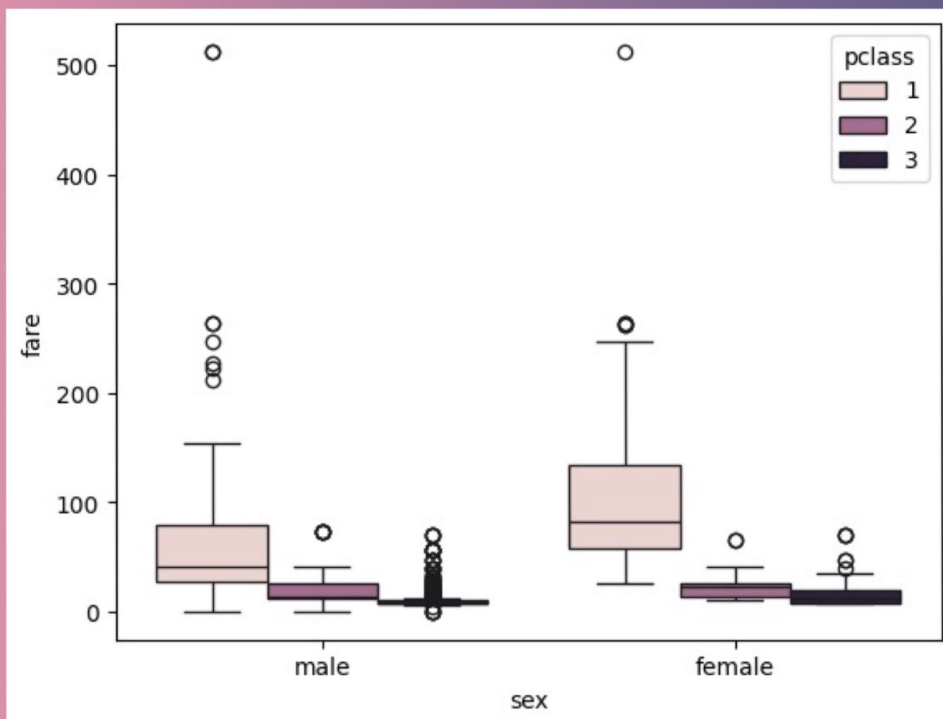
```
1 #Use seaborn library to plot Scatter Graph  
2 sns.scatterplot(data = kashti, x = 'age', y = 'fare' , hue = 'pclass')
```





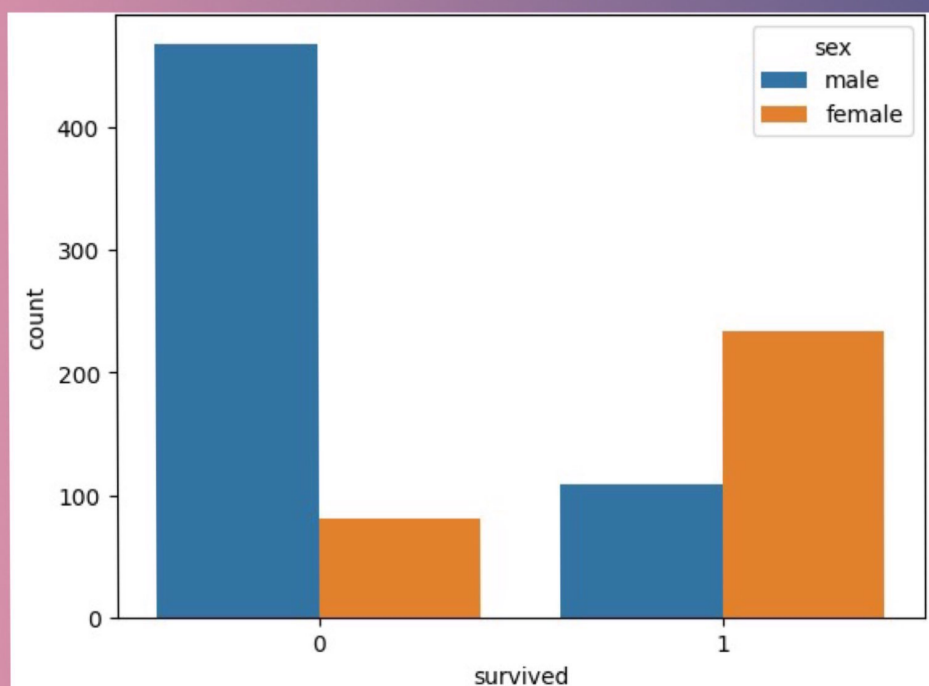


```
1 # Box plot Graph  
2 sns.boxplot(data = kashti , x = "sex", y = "fare", hue = 'pclass')
```



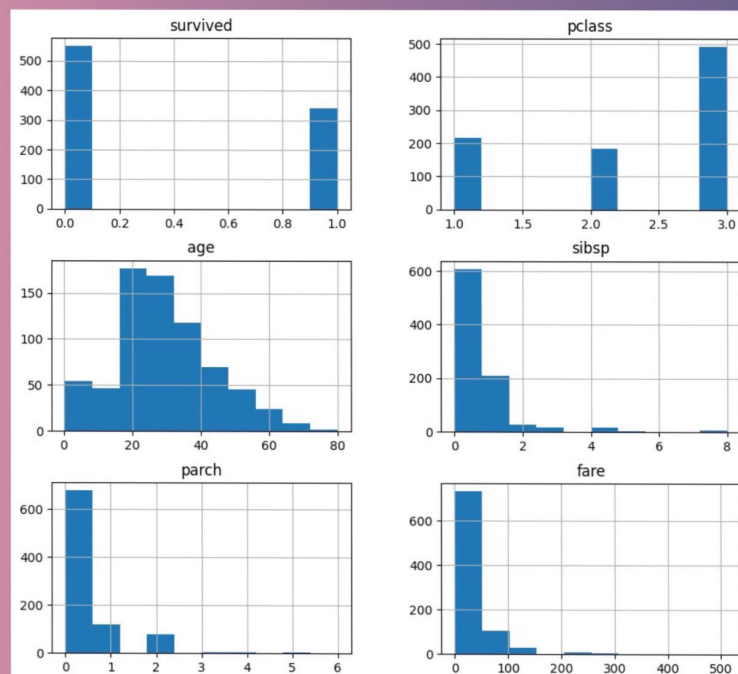


```
1 sns.countplot(x='survived', hue='sex', data=kashti)
```





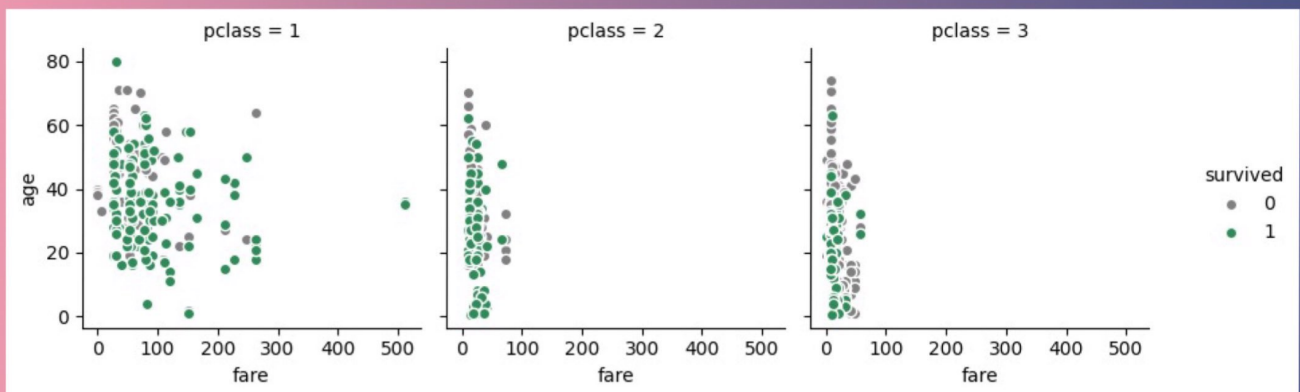
```
1 # Histogram Graph  
2 kashti.hist(bins =10, figsize = (10,9))
```







```
1 g = sns.FacetGrid(kashti, hue='survived', col='pclass', margin_titles=True, palette={1: 'seagreen', 0: 'gray'})
2 g = g.map(plt.scatter, 'fare', 'age', edgecolor='w').add_legend()
3
```





```
1 # Use Seaborn Library To plot Barplot Graph  
2 sns.barplot(data = kashti, x = 'sex', y = 'fare' , hue = 'pclass')
```

