In [2]: ▶| `import pandas as pd`

In [3]: ▶|
```
import seaborn as sns

print(sns.get_dataset_names())
```

```
['anagrams', 'anscombe', 'attention', 'brain_networks', 'car_crashes', 'd
iamonds', 'dots', 'dowjones', 'exercise', 'flights', 'fmri', 'geyser', 'g
lue', 'healthexp', 'iris', 'mpg', 'penguins', 'planets', 'seaice', 'taxi
s', 'tips', 'titanic']
```

1

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

Out[4]:

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_ma
0	0	3	male	22.0	1	0	7.2500	S	Third	man	Tr
1	1	1	female	38.0	1	0	71.2833	C	First	woman	Fal
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	Fal
3	1	1	female	35.0	1	0	53.1000	S	First	woman	Fal
4	0	3	male	35.0	0	0	8.0500	S	Third	man	Tr

◀ ▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬   ▶

2

In [31]: ▶|
```
passengers= df[df['pclass'] == 1].shape[0]

print(passengers)
```

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3

```
In [37]:    ▶|  df['is_alone'] = (df['sibsp'] == 0) & (df['parch'] == 0)

                df.head()
```

Out[37]:

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_ma
0	0	3	male	22.0	1	0	7.2500	S	Third	man	Tr
1	1	1	female	38.0	1	0	71.2833	C	First	woman	Fal
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	Fal
3	1	1	female	35.0	1	0	53.1000	S	First	woman	Fal
4	0	3	male	35.0	0	0	8.0500	S	Third	man	Tr

4

```
In [34]:    ▶|  df.groupby('pclass')['age'].mean()
```

```
Out[34]:    pclass
            1    38.233441
            2    29.877630
            3    25.140620
            Name: age, dtype: float64
```

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In [48]:

```python
df.value_counts=df['fare'].value_counts(sort=True)
df.head(10)
```

Out[48]:

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_
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	F
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	F
3	1	1	female	35.0	1	0	53.1000	S	First	woman	F
4	0	3	male	35.0	0	0	8.0500	S	Third	man	
5	0	3	male	NaN	0	0	8.4583	Q	Third	man	
6	0	1	male	54.0	0	0	51.8625	S	First	man	
7	0	3	male	2.0	3	1	21.0750	S	Third	child	F
8	1	3	female	27.0	0	2	11.1333	S	Third	woman	F
9	1	2	female	14.0	1	0	30.0708	C	Second	child	F

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In [62]:

```python
import numpy as np


df['fare_category'] =np.select ([df['fare']<10,
                    (df['fare']>=10)& (df['fare']<=50),
                    df['fare']>50],
['cheap','moderate','expensive'])

df.head()
```

Out[62]:

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_ma
0	0	3	male	22.0	1	0	7.2500	S	Third	man	Tr
1	1	1	female	38.0	1	0	71.2833	C	First	woman	Fal
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	Fal
3	1	1	female	35.0	1	0	53.1000	S	First	woman	Fal
4	0	3	male	35.0	0	0	8.0500	S	Third	man	Tr

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In [64]:
```python
male_survivors = df[(df['sex'] == 'male') & (df['survived'] == 1)]

df.head()
```

Out[64]:

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_ma
0	0	3	male	22.0	1	0	7.2500	S	Third	man	Tr
1	1	1	female	38.0	1	0	71.2833	C	First	woman	Fal
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	Fal
3	1	1	female	35.0	1	0	53.1000	S	First	woman	Fal
4	0	3	male	35.0	0	0	8.0500	S	Third	man	Tr

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In [5]:
```python
df.pop('deck')
df.head()
```

Out[5]:

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_ma
0	0	3	male	22.0	1	0	7.2500	S	Third	man	Tr
1	1	1	female	38.0	1	0	71.2833	C	First	woman	Fal
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	Fal
3	1	1	female	35.0	1	0	53.1000	S	First	woman	Fal
4	0	3	male	35.0	0	0	8.0500	S	Third	man	Tr

In [ ]: