

## Data visualization

## ▼ step-1 import labirary

```
1 import seaborn as sns
2 import matplotlib.pyplot as plt
```

## ▼ Step-2 load data set

```
1 titanic=sns.load_dataset("titanic")
2 titanic.head()
3
```

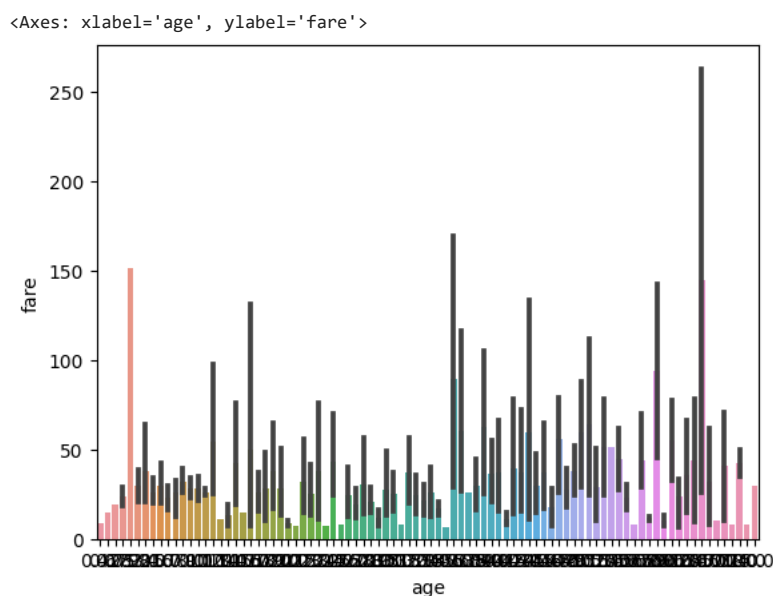
	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	deck	embal
0	0	3	male	22.0	1	0	7.2500	S	Third	man	True	NaN	South
1	1	1	female	38.0	1	0	71.2833	C	First	woman	False	C	Cr
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	False	NaN	South
3	1	1	female	35.0	1	0	53.1000	S	First	woman	False	C	South
4	0	3	male	35.0	0	0	8.0500	S	Third	man	True	NaN	South

## ▼ Step 3 plot a graph

```
1 sns.lineplot(x="fare",y="age",data=titanic)
2 plt.xlim(3)
3 plt.ylim(4)
4 plt.title("Check")
5 plt.show()
```

## ▼ Bar Plot

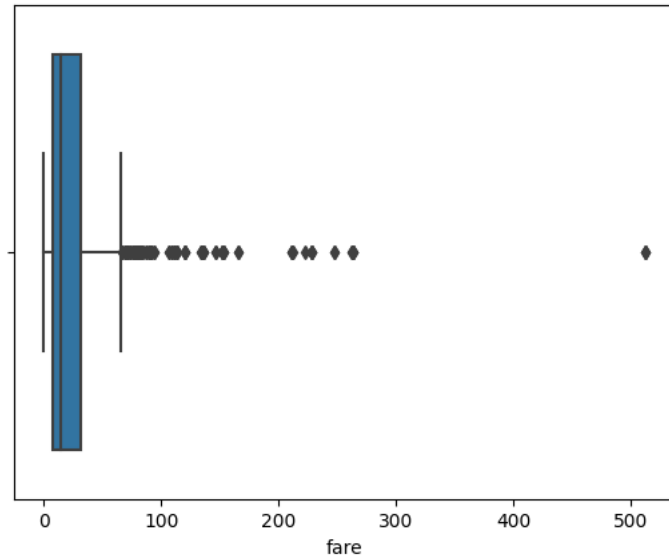
```
1 df = sns.load_dataset("titanic")
2 sns.barplot(data=df, x="age", y="fare")
```



## ▼ Boxplot

```
1 df = sns.load_dataset("titanic")
2 sns.boxplot(x=df["fare"])
```

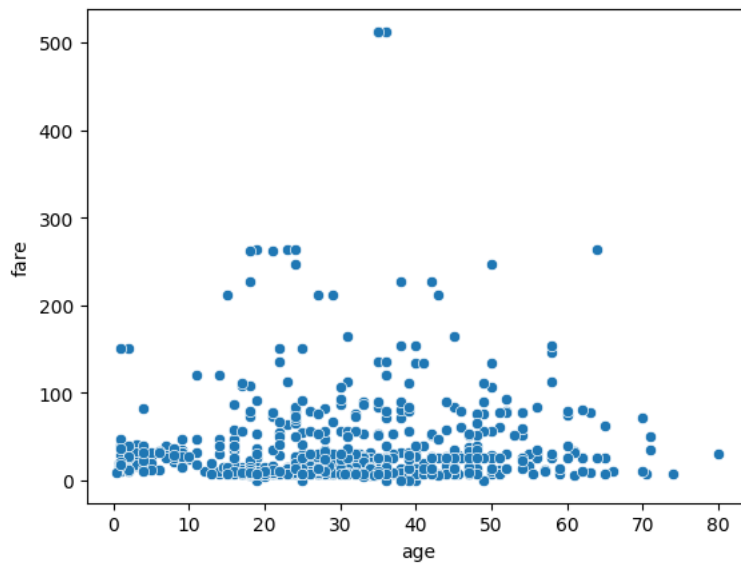
<Axes: xlabel='fare'>



### ▼ Scatter plot

```
1 sns.scatterplot(data=titanic, x="age", y="fare")
```

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



### ▼ Cat plot

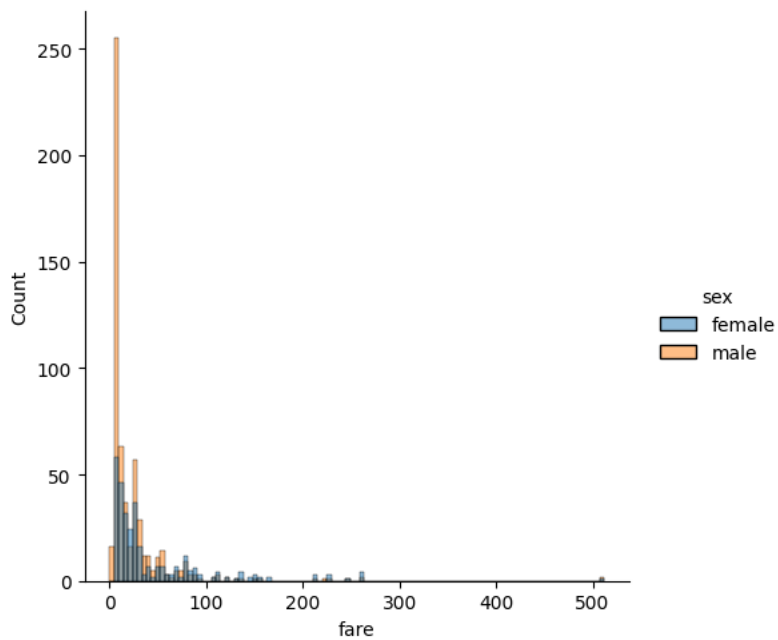
```
1 df = sns.load_dataset("titanic")
2 sns.catplot(data=df, x="fare", y="class")
```

```
<seaborn.axisgrid.FacetGrid at 0x7fc5bf9a1330>
```



```
1 sns.displot(data = titanic , x = "fare" , hue = "sex", hue_order = ['female', 'male'])
```

```
<seaborn.axisgrid.FacetGrid at 0x7fc5bf8ffb50>
```

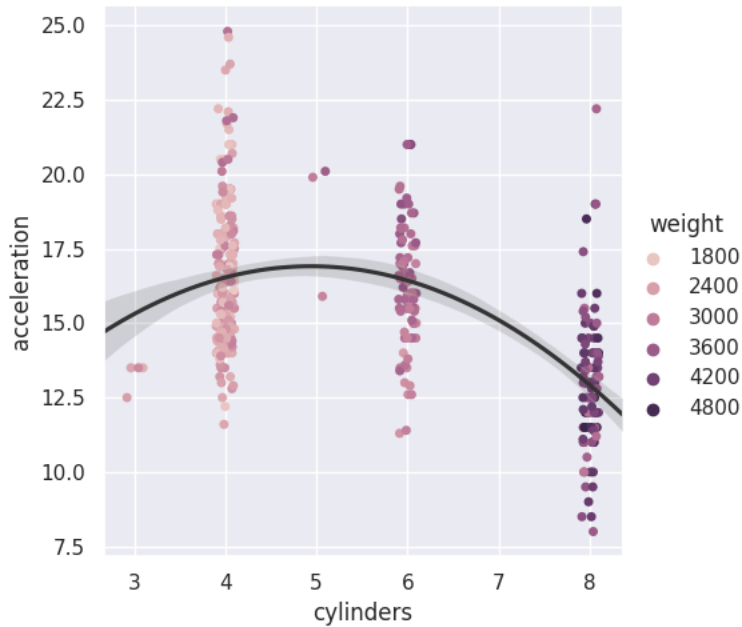


```
1 sns.heatmap(data = titanic.corr())
```

```
<ipython-input-68-f4da9c94fae6>:1: FutureWarning: The default value of numeric_only in DataFrame.corr is
sns.heatmap(data = titanic.corr())
```

```
1 import seaborn as sns
2 sns.set_theme()
3
4 mpg = sns.load_dataset("mpg")
5 sns.catplot(
6     data=mpg, x="cylinders", y="acceleration", hue="weight",
7     native_scale=True, zorder=1
8 )
9 sns.regplot(
10     data=mpg, x="cylinders", y="acceleration",
11     scatter=False, truncate=False, order=2, color=".2",
12 )
13
```

```
<Axes: xlabel='cylinders', ylabel='acceleration'>
```



```
1 import numpy as np
2 import pandas as pd
3 import seaborn as sns
4 sns.set_theme(style="whitegrid")
5
6 rs = np.random.RandomState(365)
7 values = rs.randn(365, 4).cumsum(axis=0)
8 dates = pd.date_range("1 1 2016", periods=365, freq="D")
9 data = pd.DataFrame(values, dates, columns=["A", "B", "C", "D"])
10 data = data.rolling(7).mean()
11
12 sns.lineplot(data=data, palette="tab10", linewidth=2.5)
```

&lt;Axes: &gt;

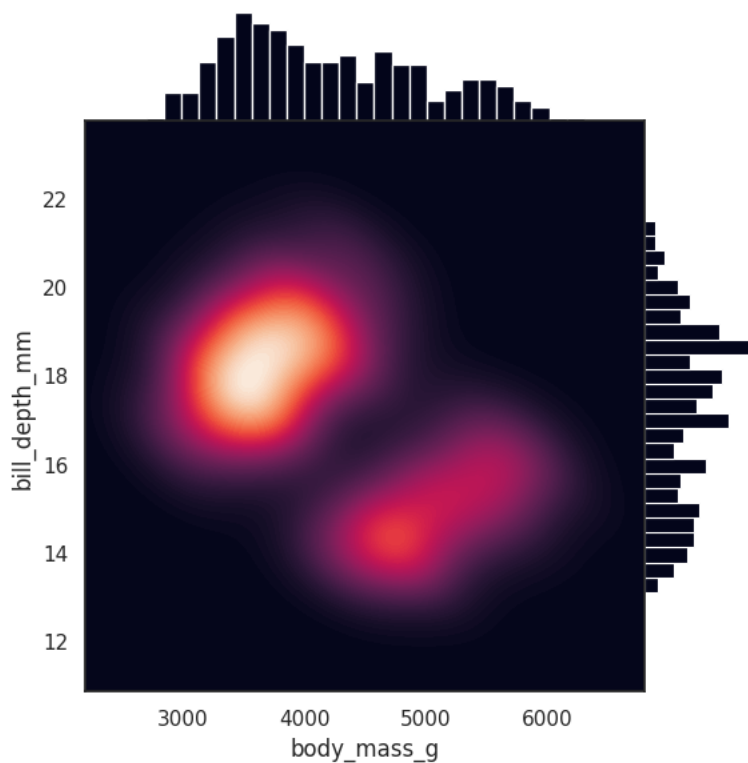


```

1 import seaborn as sns
2 sns.set_theme(style="white")
3
4 df = sns.load_dataset("penguins")
5
6 g = sns.JointGrid(data=df, x="body_mass_g", y="bill_depth_mm", space=0)
7 g.plot_joint(sns.kdeplot,
8             fill=True, clip=((2200, 6800), (10, 25)),
9             thresh=0, levels=100, cmap="rocket")
10 g.plot_marginals(sns.histplot, color="#03051A", alpha=1, bins=25)
11

```

&lt;seaborn.axisgrid.JointGrid at 0x7fc5bf4d7f40&gt;



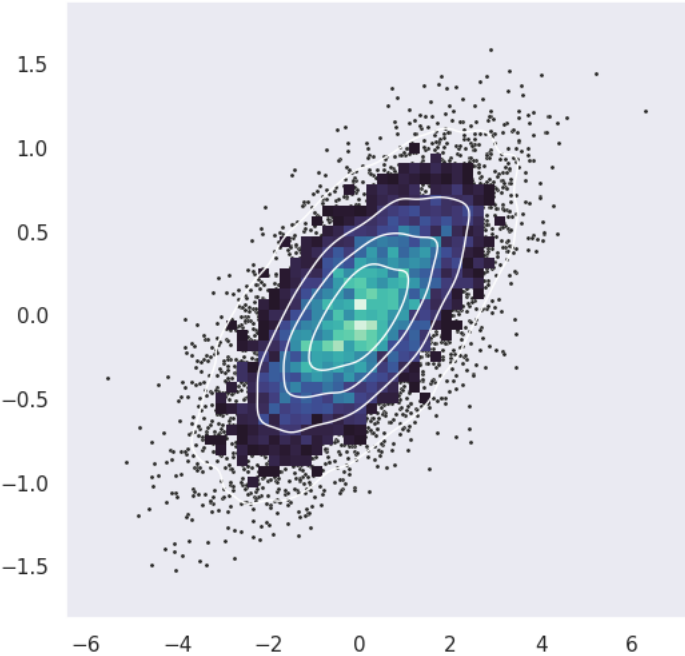
```

1 import numpy as np
2 import seaborn as sns
3 import matplotlib.pyplot as plt
4 sns.set_theme(style="dark")
5
6 # Simulate data from a bivariate Gaussian
7 n = 10000
8 mean = [0, 0]
9 cov = [(2, .4), (.4, .2)]
10 rng = np.random.RandomState(0)
11 x, y = rng.multivariate_normal(mean, cov, n).T
12
13 # Draw a combo histogram and scatterplot with density contours
14 f, ax = plt.subplots(figsize=(6, 6))
15 sns.scatterplot(x=x, y=y, s=5, color=".15")
16 sns.histplot(x=x, y=y, bins=50, pthresh=.1, cmap="mako")
17 sns.kdeplot(x=x, y=y, levels=5, color="w", linewidths=1)
18
19

```



<Axes: >



[Colab paid products](#) - [Cancel contracts here](#)

