Line Plot

In [1]:
```python
#import libraries

import seaborn as sns
import matplotlib.pyplot as plt

#load dataset

flowers = sns.load_dataset('iris')
print(flowers)
```

```
     sepal_length  sepal_width  petal_length  petal_width    species
0             5.1          3.5           1.4          0.2     setosa
1             4.9          3.0           1.4          0.2     setosa
2             4.7          3.2           1.3          0.2     setosa
3             4.6          3.1           1.5          0.2     setosa
4             5.0          3.6           1.4          0.2     setosa
..            ...          ...           ...          ...        ...
145           6.7          3.0           5.2          2.3  virginica
146           6.3          2.5           5.0          1.9  virginica
147           6.5          3.0           5.2          2.0  virginica
148           6.2          3.4           5.4          2.3  virginica
149           5.9          3.0           5.1          1.8  virginica

[150 rows x 5 columns]
```
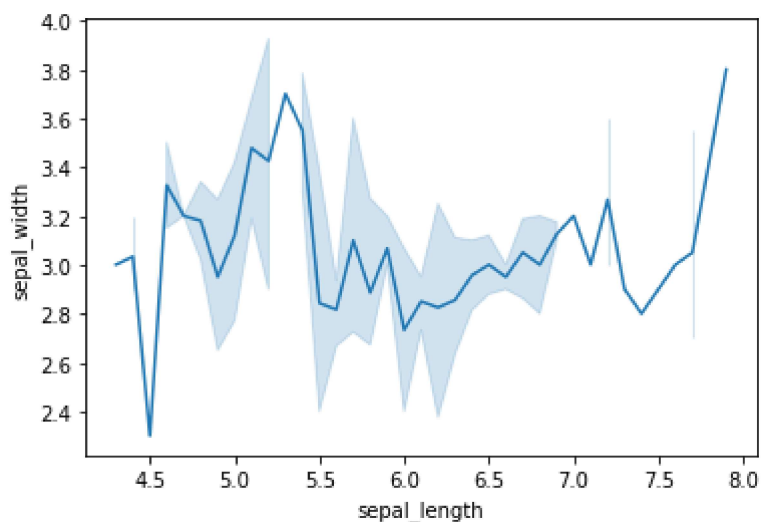
In [2]:
```python
#import libraries

import seaborn as sns
import matplotlib.pyplot as plt

#load dataset

flowers = sns.load_dataset('iris')

sns.lineplot(x = 'sepal_length', y = 'sepal_width', data = flowers)
plt.show()
```

```python
#import libraries

import seaborn as sns
import matplotlib.pyplot as plt

#load dataset

flowers = sns.load_dataset('iris')

#create the plot
sns.lineplot(x = 'sepal_length', y = 'sepal_width', data = flowers)

#setting the title of the plot
plt.title('Plot of flowers')

#adding the limit of axis

plt.xlim(4)
plt.ylim(2)

plt.show()
```

```python
#import libraries

import seaborn as sns
import matplotlib.pyplot as plt

#removing the style of the plot


#load dataset

flowers = sns.load_dataset('iris')

#create the plot
sns.lineplot(x = 'sepal_length', y = 'sepal_width', data = flowers)

#setting the title of the plot
plt.title('Plot of flowers')
```
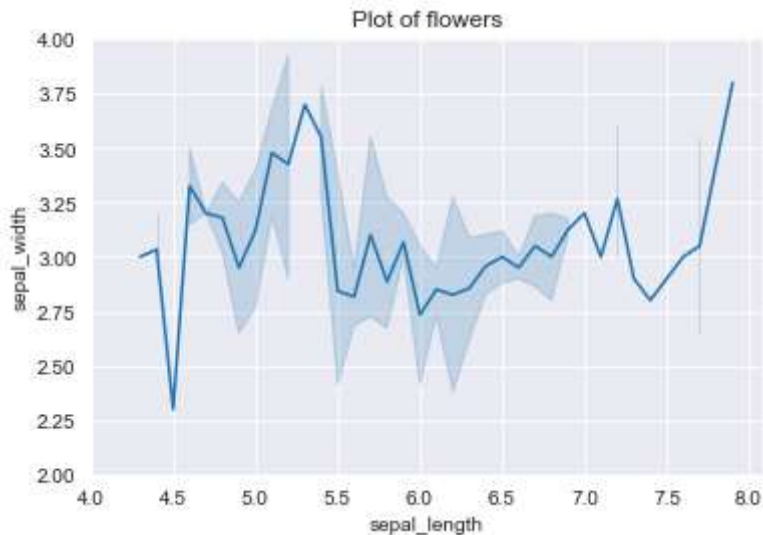
```python
#adding the limit of axis

plt.xlim(4)
plt.ylim(2)

#setting the styling of the plots
#white, dark, whitegrid, darkgrid, ticks
sns.set_style(style='darkgrid')
sns.set_style(style = None, rc = None)

plt.show()
```


Plot of flowers

In [40]:

```python
#import libraries

import seaborn as sns
import matplotlib.pyplot as plt

#removing the style of the plot


#load dataset

flowers = sns.load_dataset('iris')

#setting the figure size

plt.figure(figsize=(8,4))

#create the plot
sns.lineplot(x = 'sepal_length', y = 'sepal_width', data = flowers)

#setting the title of the plot
plt.title('Plot of flowers')

#adding the limit of axis

plt.xlim(4)
plt.ylim(2)

#setting the styling of the plots
#white, dark, whitegrid, darkgrid, ticks
```
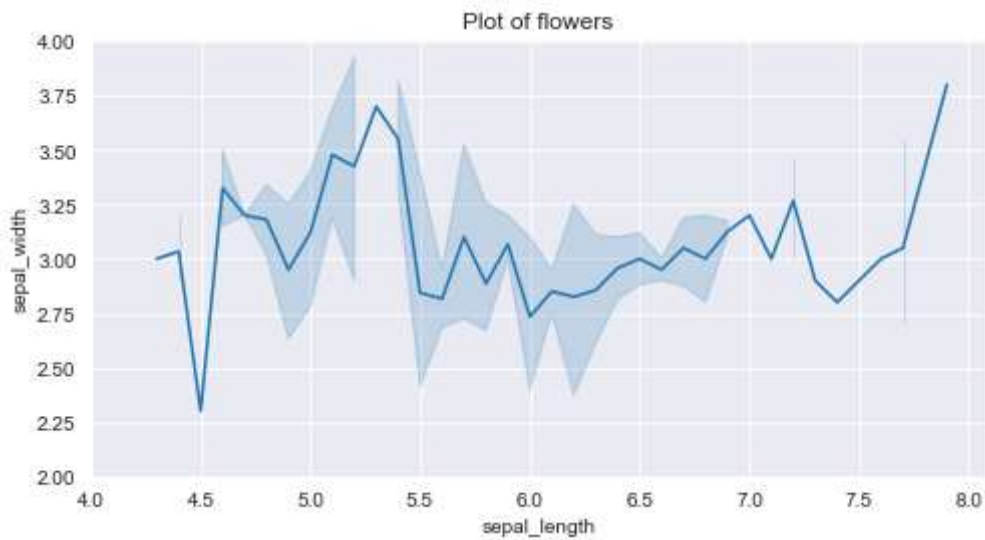
```
sns.set_style(style='darkgrid')
sns.set_style(style = None, rc = None)

plt.show()
```


Plot of flowers

Bar plot

In [16]:
```
#import libraries

import seaborn as sns
import matplotlib.pyplot as plt

#load dataset

flowers = sns.load_dataset('iris')
print(flowers)
```

```
     sepal_length  sepal_width  petal_length  petal_width    species
0             5.1          3.5           1.4          0.2     setosa
1             4.9          3.0           1.4          0.2     setosa
2             4.7          3.2           1.3          0.2     setosa
3             4.6          3.1           1.5          0.2     setosa
4             5.0          3.6           1.4          0.2     setosa
..            ...          ...           ...          ...        ...
145           6.7          3.0           5.2          2.3  virginica
146           6.3          2.5           5.0          1.9  virginica
147           6.5          3.0           5.2          2.0  virginica
148           6.2          3.4           5.4          2.3  virginica
149           5.9          3.0           5.1          1.8  virginica

[150 rows x 5 columns]
```

In [23]:
```
#import libraries

import seaborn as sns
import matplotlib.pyplot as plt

#load dataset
```
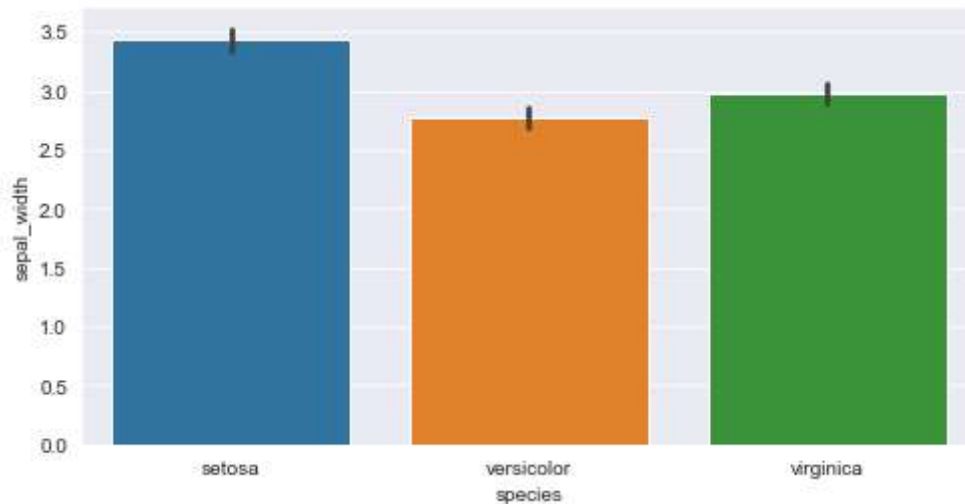
```python
flowers = sns.load_dataset('iris')

#changing the figure

plt.figure(figsize=(8,4))

#creating the barplot

sns.barplot(x='species', y = 'sepal_width' ,data = flowers)

plt.show()
```


In [24]:
```python
#importing libraries
import seaborn as sns
import matplotlib.pyplot as plt

titanic_ship_dataset =  sns.load_dataset('titanic')
print(titanic_ship_dataset)
```

```
     survived  pclass     sex   age  sibsp  parch     fare embarked   class  \
0           0       3    male  22.0      1      0   7.2500        S   Third
1           1       1  female  38.0      1      0  71.2833        C   First
2           1       3  female  26.0      0      0   7.9250        S   Third
3           1       1  female  35.0      1      0  53.1000        S   First
4           0       3    male  35.0      0      0   8.0500        S   Third
..        ...     ...     ...   ...    ...    ...      ...      ...     ...
886         0       2    male  27.0      0      0  13.0000        S  Second
887         1       1  female  19.0      0      0  30.0000        S   First
888         0       3  female   NaN      1      2  23.4500        S   Third
889         1       1    male  26.0      0      0  30.0000        C   First
890         0       3    male  32.0      0      0   7.7500        Q   Third

       who  adult_male deck  embark_town alive  alone
0      man        True  NaN  Southampton    no  False
1    woman       False    C    Cherbourg   yes  False
2    woman       False  NaN  Southampton   yes   True
3    woman       False    C  Southampton   yes  False
4      man        True  NaN  Southampton    no   True
..     ...         ...  ...          ...   ...    ...
886    man        True  NaN  Southampton    no   True
887  woman       False    B  Southampton   yes   True
888  woman       False  NaN  Southampton    no  False
```

```
889    man          True  C     Cherbourg     yes   True
890    man          True  NaN   Queenstown    no    True

[891 rows x 15 columns]
```
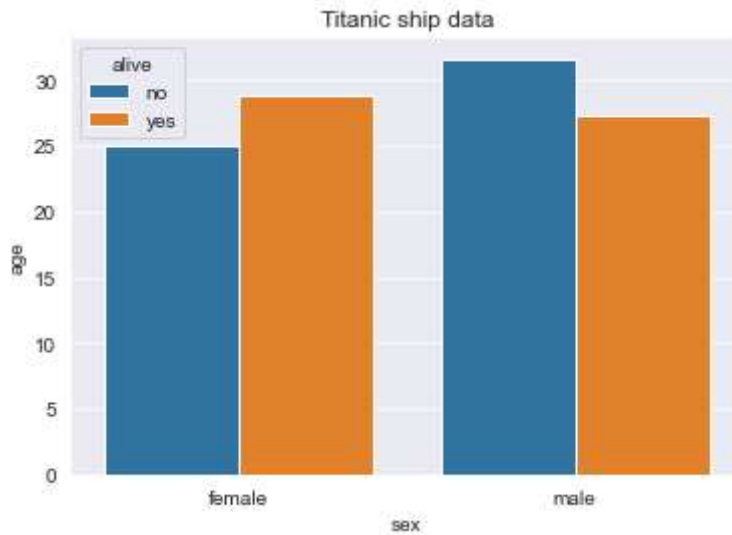
In [42]:
```python
import seaborn as sns
import matplotlib.pyplot as plt
from numpy import mean
titanic_dataset = sns.load_dataset('titanic')

plt.title('Titanic ship data')

sns.barplot(x ='sex', y = 'age', hue='alive' ,data = titanic_dataset, order=['female',

sns.set_style('darkgrid')
sns.set_style(style=None, rc = None)

plt.show()
```


In [43]:
```python
import seaborn as sns
import matplotlib.pyplot as plt
from numpy import mean
titanic_dataset = sns.load_dataset('titanic')

plt.title('Titanic ship data')

sns.barplot(x ='age', y = 'sex', hue='alive' ,data = titanic_dataset, order=['female',

sns.set_style('darkgrid')
sns.set_style(style=None, rc = None)

plt.show()
```

Titanic ship data
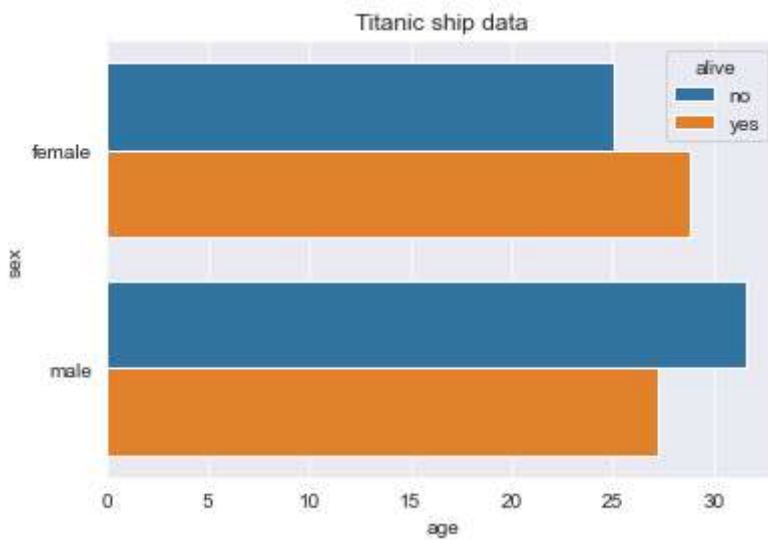
Box plot

In [50]:
```python
import seaborn as sns

tips_data = sns.load_dataset('tips')
tips_data.describe()
```

Out[50]:

|	total_bill	tip	size
count	244.000000	244.000000	244.000000
mean	19.785943	2.998279	2.569672
std	8.902412	1.383638	0.951100
min	3.070000	1.000000	1.000000
25%	13.347500	2.000000	2.000000
50%	17.795000	2.900000	2.000000
75%	24.127500	3.562500	3.000000
max	50.810000	10.000000	6.000000

In [53]:
```python
import seaborn as sns
import matplotlib.pyplot as plt
tips_data = sns.load_dataset('tips')

sns.boxplot(x='sex', y='tip', data=tips_data, hue='smoker', dodge=True)
plt.show()
```
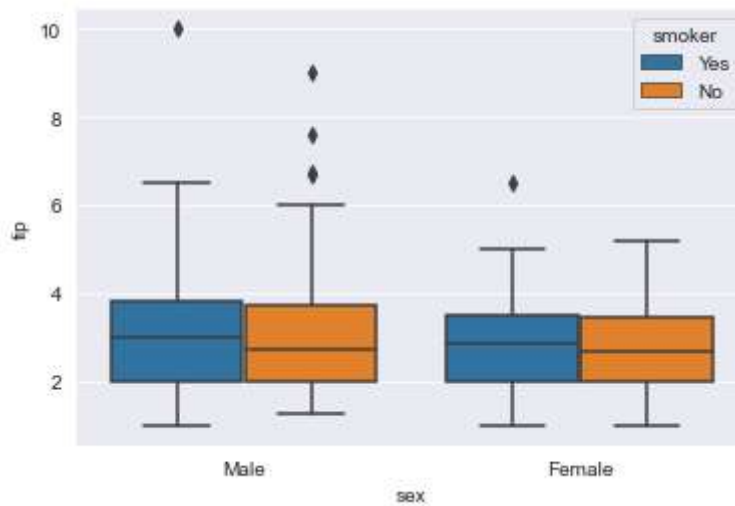
In [59]:
```python
import seaborn as sns
import matplotlib.pyplot as plt
tips_data = sns.load_dataset('tips')

sns.boxplot(x='tip', y='sex', data=tips_data, hue='smoker', dodge=True)
plt.show()
```
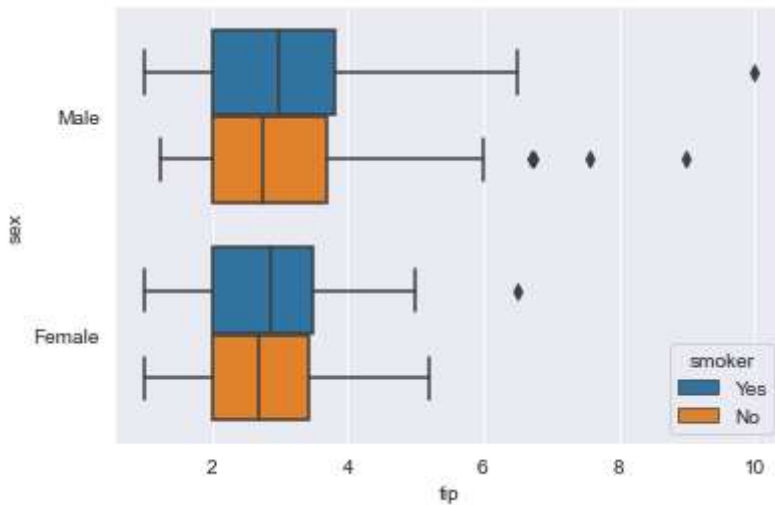

In [60]:
```python
import seaborn as sns
import matplotlib.pyplot as plt
import pandas as pd
import numpy as np


titanic_data = sns.load_dataset('titanic')
titanic_data.head()
```

Out[60]:

	survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	deck	e
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	C	First	woman	False	C	
2	1	3	female	26.0	0	0	7.9250	S	Third	woman	False	NaN	S

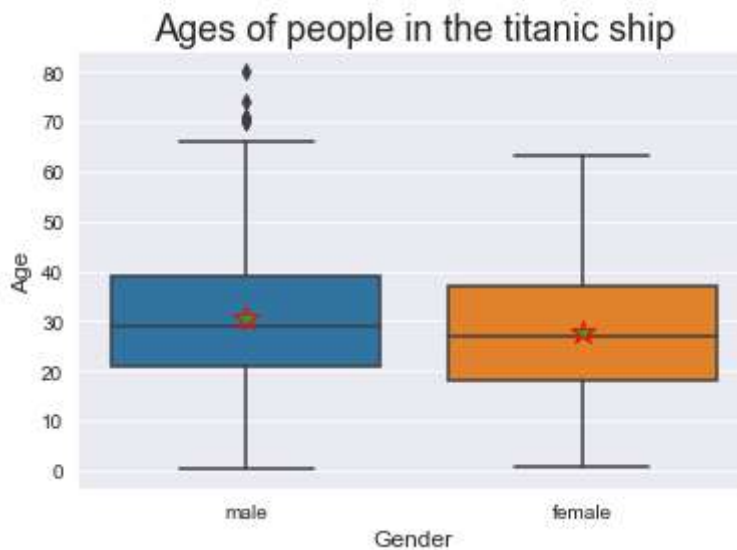| survived	pclass	sex	age	sibsp	parch	fare	embarked	class	who	adult_male	deck	e
3	1	1	female	35.0	1	0	53.1000	S	First	woman	False	C	S
4	0	3	male	35.0	0	0	8.0500	S	Third	man	True	NaN	S

In [72]:

```python
import seaborn as sns
import matplotlib.pyplot as plt
import pandas as pd
import numpy as np


titanic_data = sns.load_dataset('titanic')

p1 = sns.boxplot(x='sex',
                 y='age',
                 data = titanic_data,
                 showmeans = True,
                 meanprops = {
                     'marker': '*',
                     'markersize' : '12',
                     'markeredgecolor': 'red'
                 }
                 )
plt.title('Ages of people in the titanic ship', size = '18')
plt.xlabel('Gender', size = '12')
plt.ylabel('Age', size = '12')
```

Out[72]:   Text(0, 0.5, 'Age')

In [ ]: