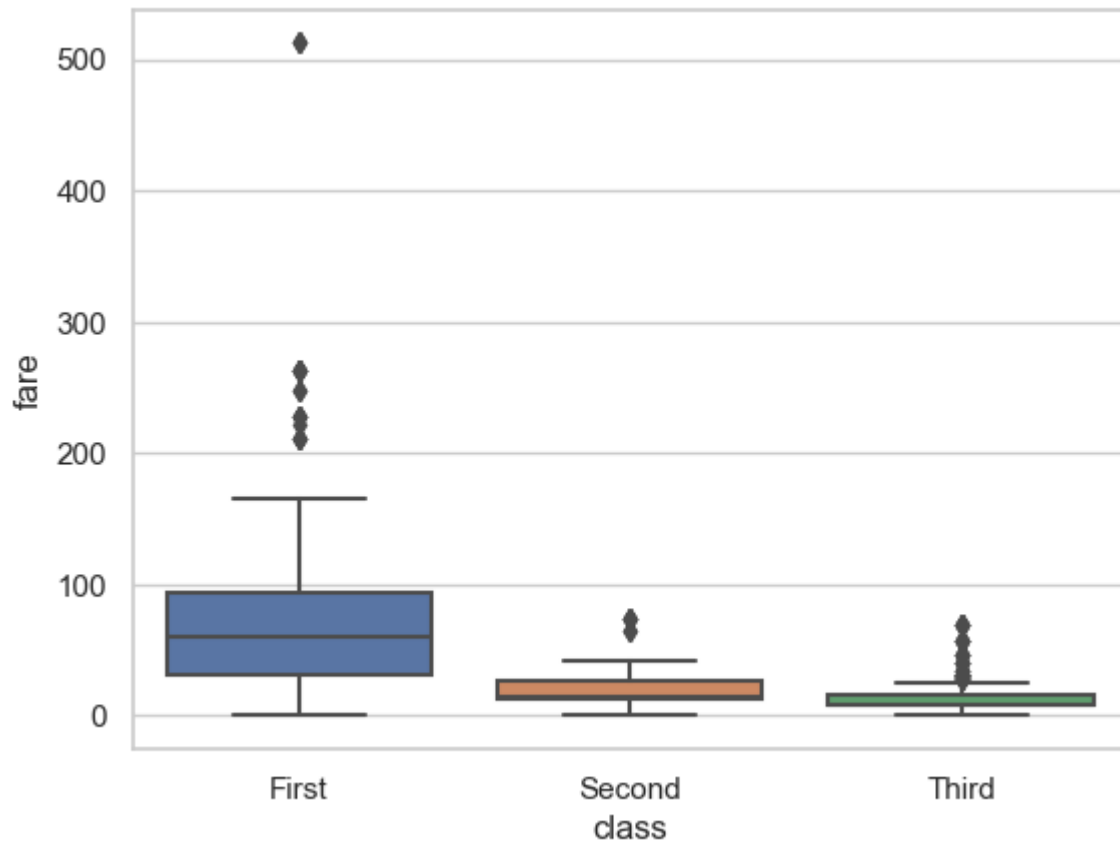


```
In [1]: # import library
import seaborn as sns
# canvas(balloon board)
sns.set(style="whitegrid")

kashti=sns.load_dataset("titanic")
sns.boxplot(x="class", y="fare", data=kashti)
```

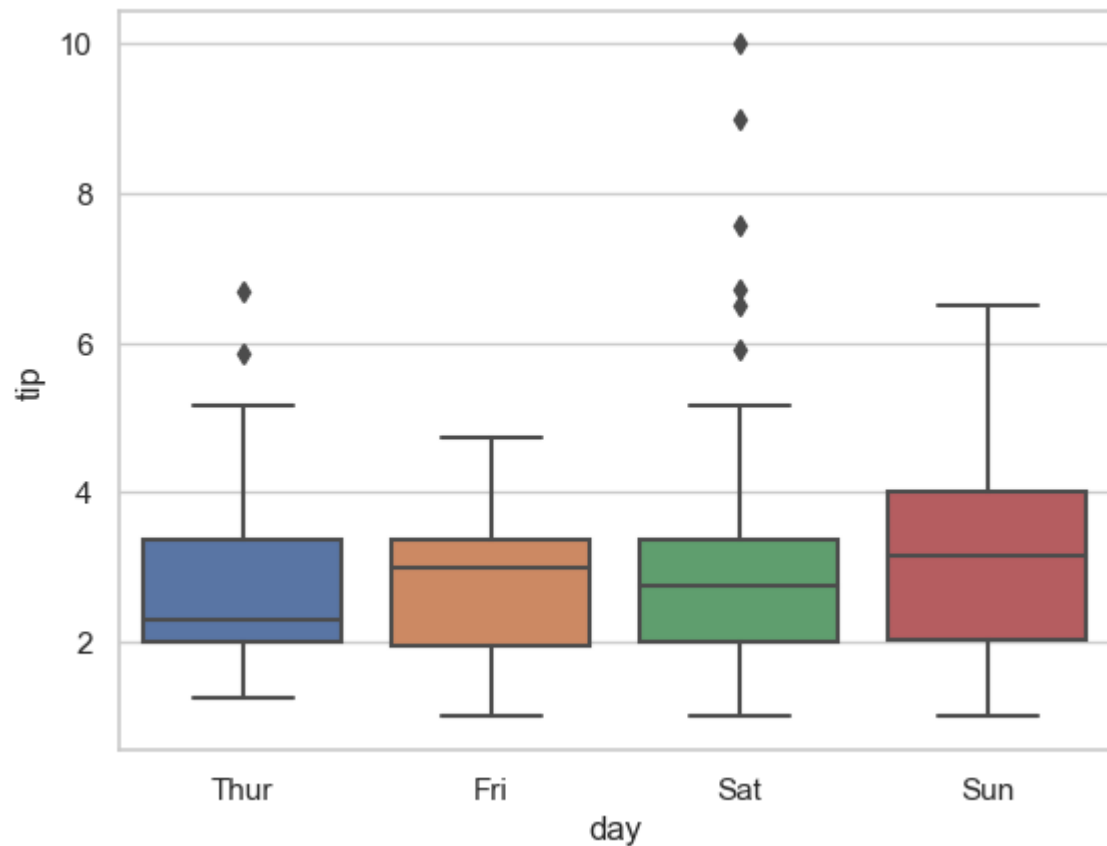
Out[1]: <Axes: xlabel='class', ylabel='fare'>



```
In [2]: import seaborn as sns

tip=sns.load_dataset("tips")
tip
sns.boxplot(x="day",y="tip", data=tip)
```

Out[2]: <Axes: xlabel='day', ylabel='tip'>



- HEAD

```
In [3]: import seaborn as sns
import pandas as pd
import numpy as np

kashti= sns.load_dataset("titanic")
kashti.head()
```

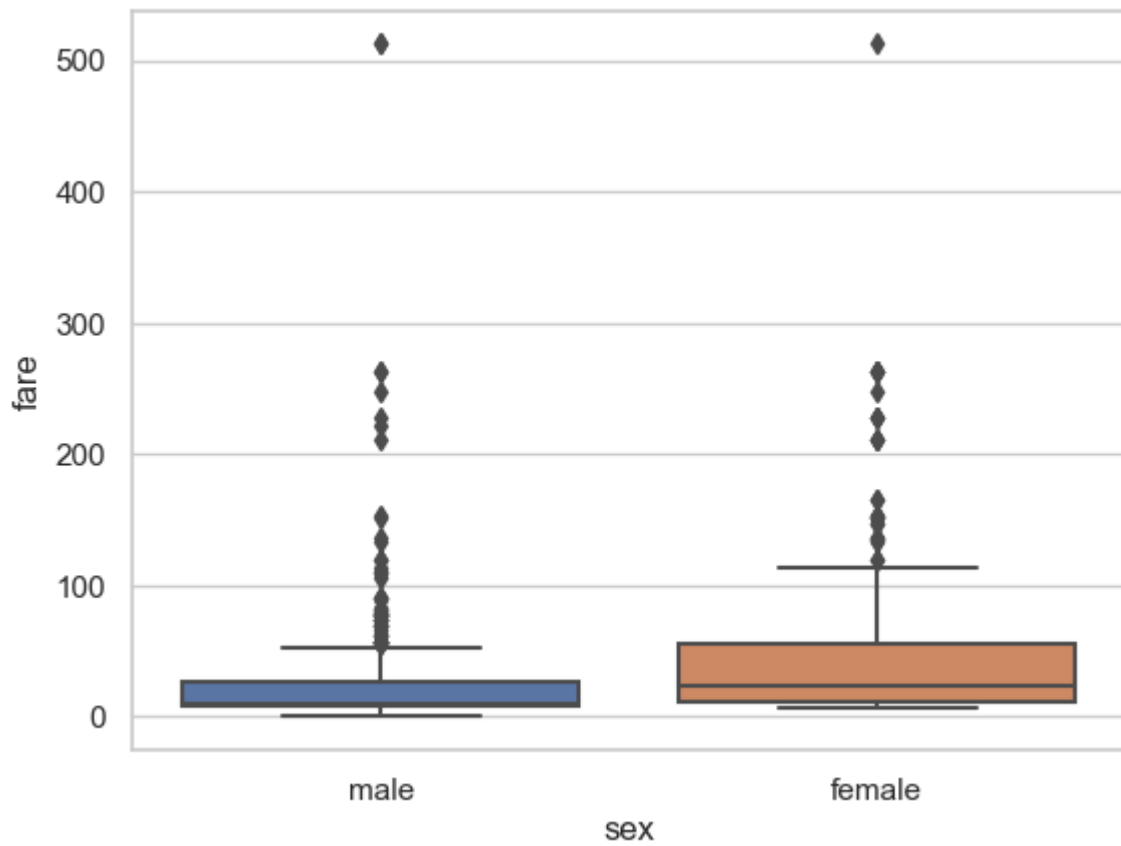
```
Out[3]:
```

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

```
In [4]: import seaborn as sns
import pandas as pd
import numpy as np

kashti=sns.load_dataset("titanic")
sns.boxplot(x="sex", y="fare", data=kashti)
```

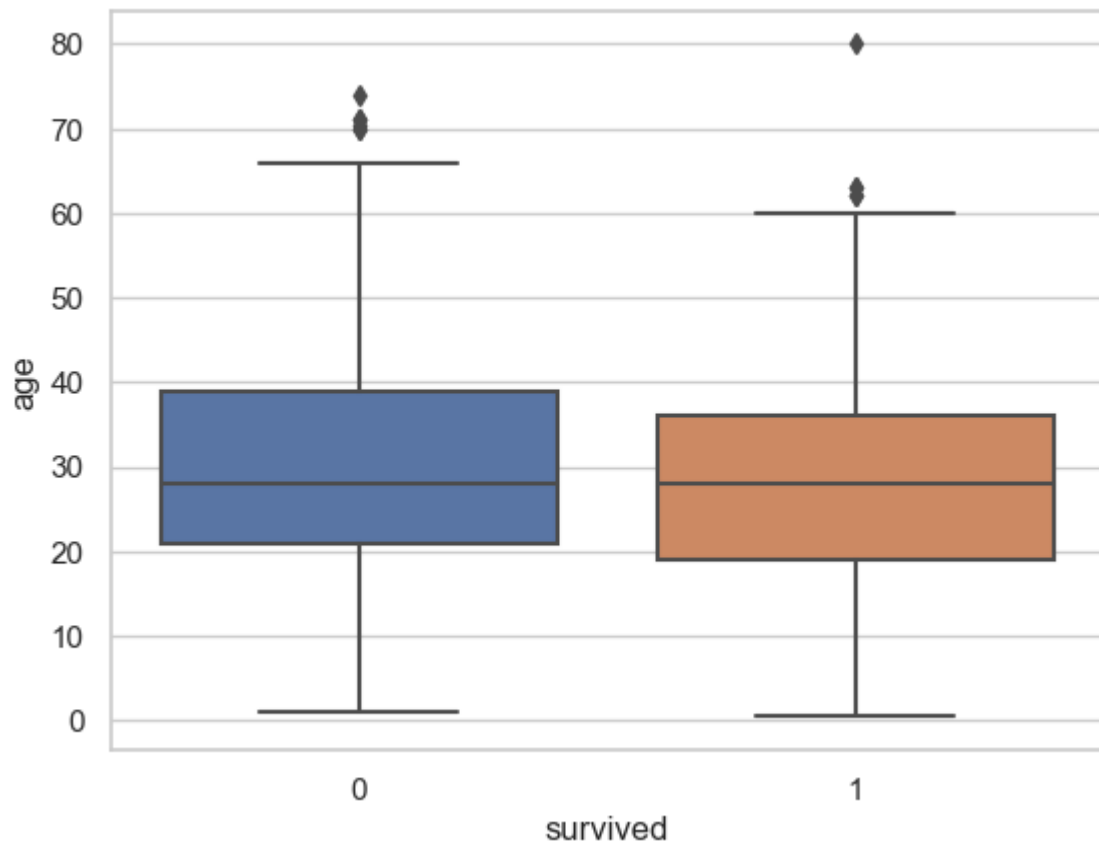
```
Out[4]: <Axes: xlabel='sex', ylabel='fare'>
```



```
In [5]: import seaborn as sns
import pandas as pd
import numpy as np

kashti=sns.load_dataset("titanic")
# sns.boxplot(x="sex", y="fare", data=kashti)
sns.boxplot(x="survived", y="age", data=kashti)
```

```
Out[5]: <Axes: xlabel='survived', ylabel='age'>
```

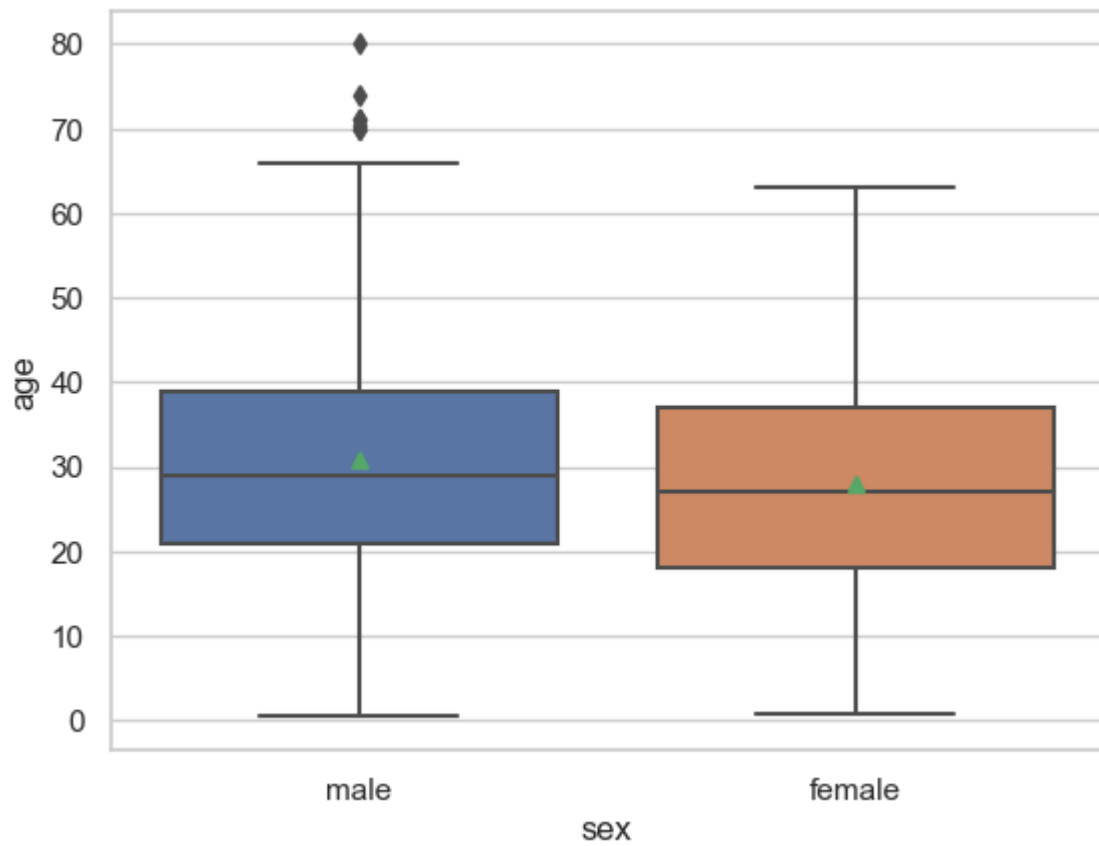


blue right side area is called interquartile range center is called median standing thing is called maximum non outlier data lower standing is called non outlier data black dots are called outliers

Show means

```
In [6]: sns.boxplot(x="sex", y="age", data=kashti, showmeans=True)
# import matplotlib.pyplot as plt
# plt.show()
```

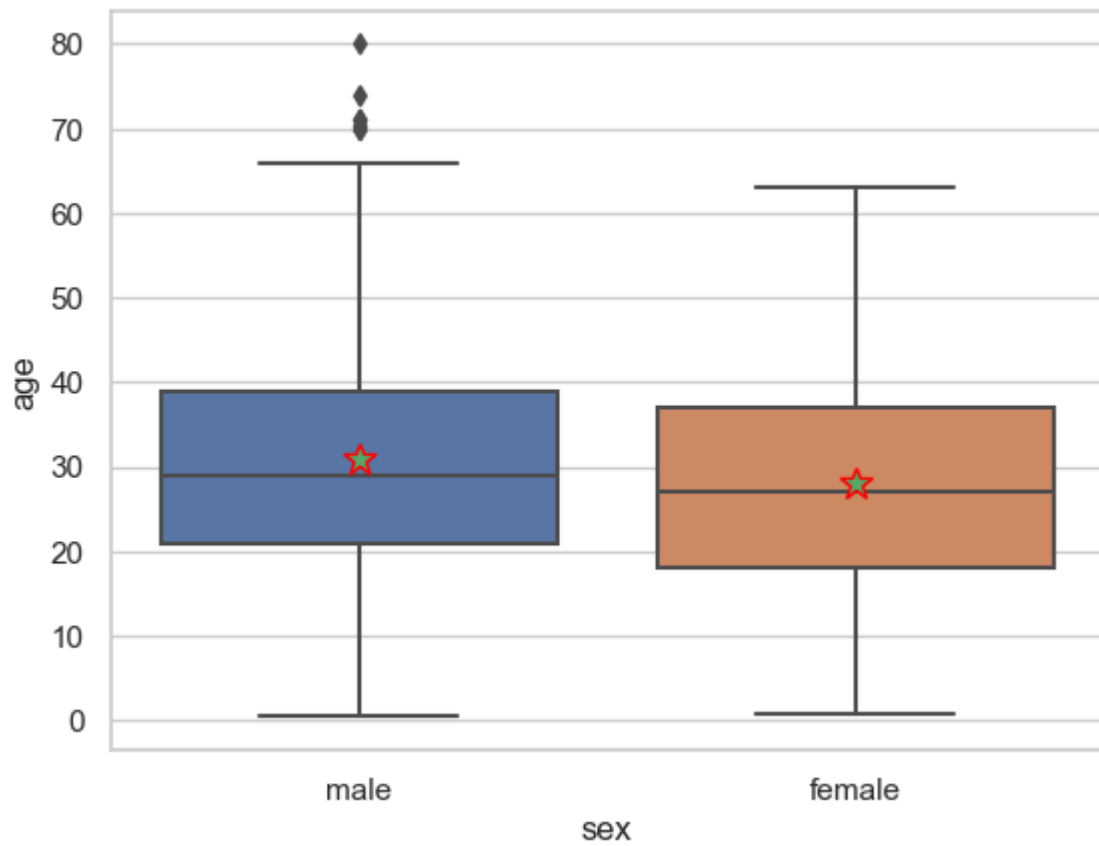
```
Out[6]: <Axes: xlabel='sex', ylabel='age'>
```



change the color,size and different marks of mean

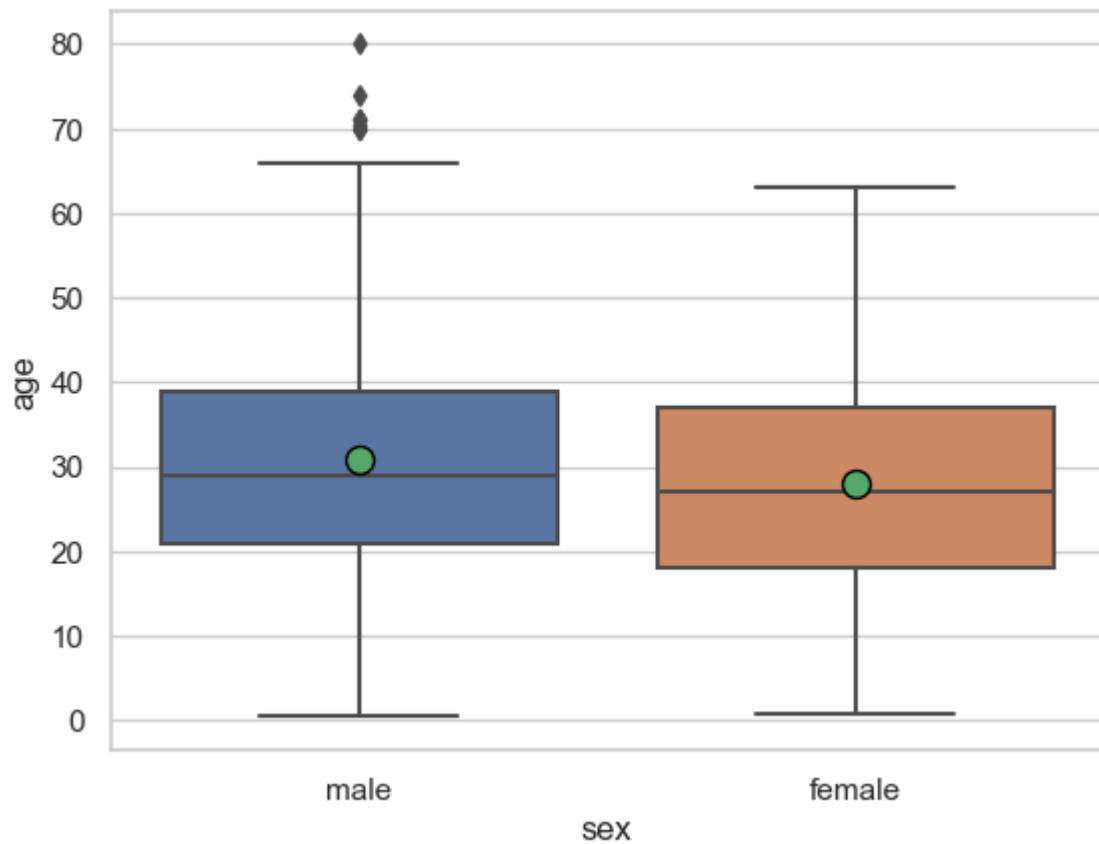
```
In [7]: sns.boxplot(x="sex", y="age", data=kashti, showmeans=True,  
                  meanprops={"marker": "*", "markersize": "12",  
                             "markeredgecolor": "red"})
```

```
Out[7]: <Axes: xlabel='sex', ylabel='age'>
```



```
In [8]: sns.boxplot(x="sex", y="age", data=kashti, showmeans=True,  
                meanprops={"marker": ".", "markeredgecolor": "black", "markersize": "20"})
```

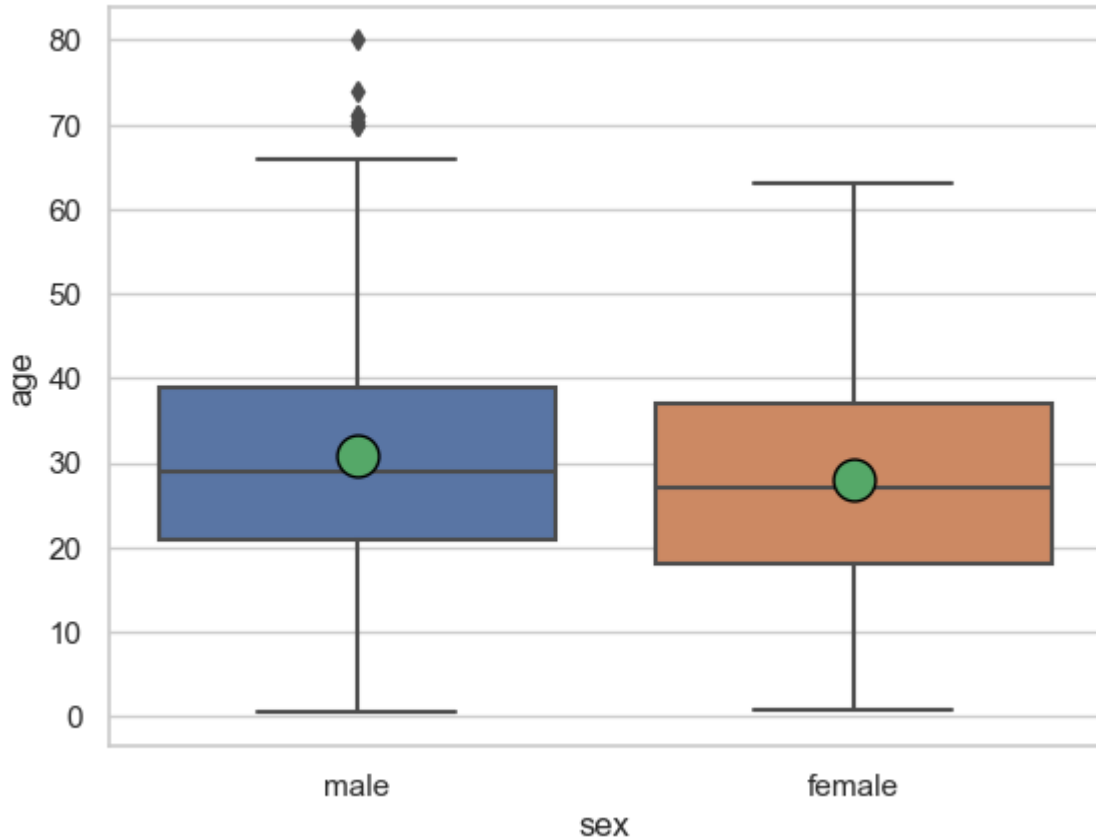
```
Out[8]: <Axes: xlabel='sex', ylabel='age'>
```



Marker means

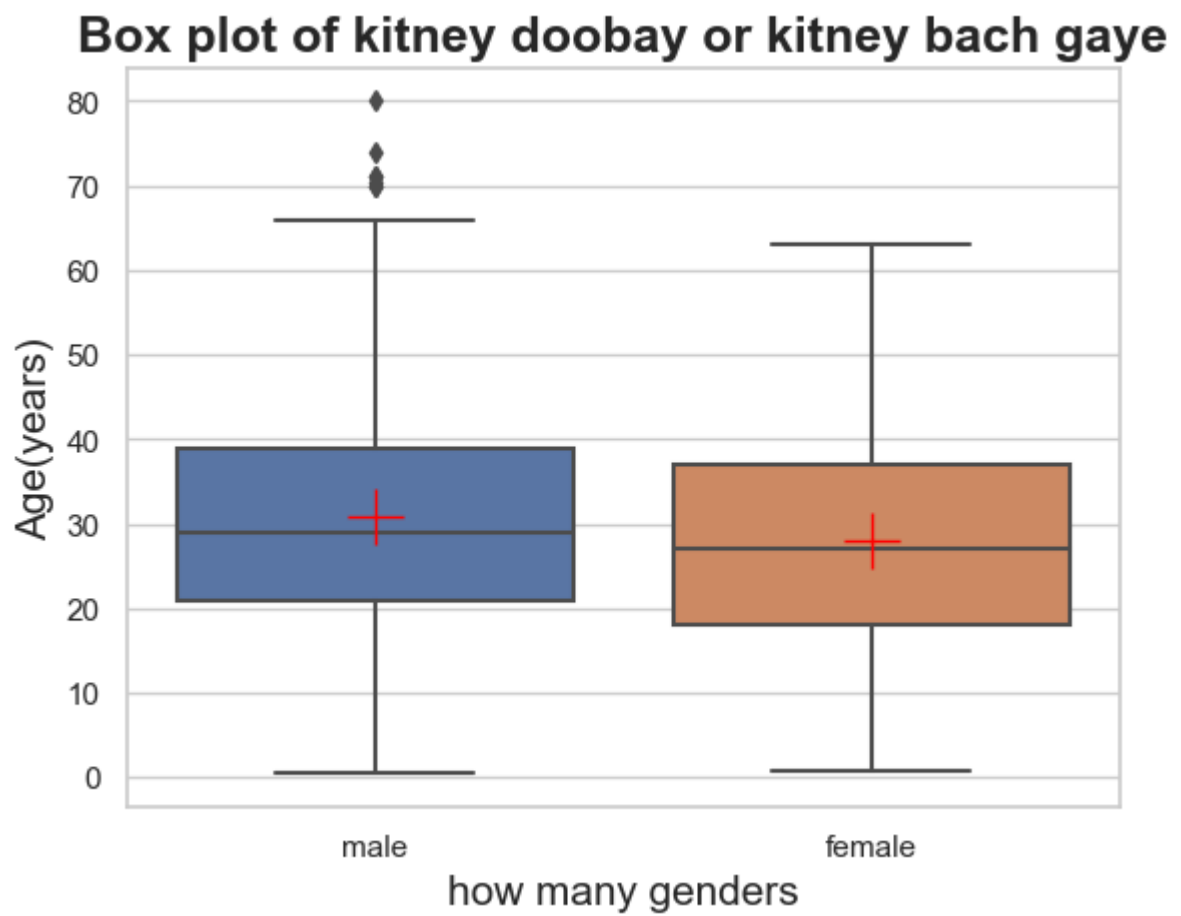
```
In [9]: sns.boxplot(x="sex", y="age", data=kashti, showmeans=True,  
                  meanprops={"marker": ".", "markeredgecolor": "black",  
                             "markersize": "30", })
```

```
Out[9]: <Axes: xlabel='sex', ylabel='age'>
```



Show Labels, bold, size, xlabel, ylables

```
In [10]: import seaborn as sns  
import matplotlib.pyplot as plt  
import pandas as pd  
import numpy as np  
  
kashti=sns.load_dataset("titanic")  
sns.boxplot(x="sex", y="age", data=kashti,  
            showmeans=True, meanprops={  
                "marker": "+",  
                "markersize": "20",  
                "markeredgecolor": "red"})  
  
# show labels  
  
plt.xlabel("how many genders", size="15")  
plt.ylabel("Age(years)", size="15")  
plt.title("Box plot of kitney doobay or kitney bach gaye", size="18",weight="bold")  
plt.show()
```



In [11]: *# facet wrap and facet grid??? assigment*