assn9

May 22, 2023

```
[1]: #Aishwarya kelgandre Roll no.73 batch T3
     import pandas as pd
     import numpy as np
     import matplotlib.pyplot as plt
     s1 =pd.Series(range(1,10,1))
     s1
     import seaborn as sns
     titanic = sns.load_dataset("titanic")
     titanic
```

```
[1]:      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]
```

1

```
[3]: titanic.head(10)
```

```
[3]:    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
     5         0       3    male   NaN      0      0   8.4583        Q   Third
     6         0       1    male  54.0      0      0  51.8625        S   First
     7         0       3    male   2.0      3      1  21.0750        S   Third
     8         1       3  female  27.0      0      2  11.1333        S   Third
     9         1       2  female  14.0      1      0  30.0708        C  Second

          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
     5    man        True  NaN   Queenstown    no   True
     6    man        True    E  Southampton    no   True
     7  child       False  NaN  Southampton    no  False
     8  woman       False  NaN  Southampton   yes  False
     9  child       False  NaN    Cherbourg   yes  False
```

```
[4]: titanic.head(10)
```

```
[4]:    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
     5         0       3    male   NaN      0      0   8.4583        Q   Third
     6         0       1    male  54.0      0      0  51.8625        S   First
     7         0       3    male   2.0      3      1  21.0750        S   Third
     8         1       3  female  27.0      0      2  11.1333        S   Third
     9         1       2  female  14.0      1      0  30.0708        C  Second

          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
     5    man        True  NaN   Queenstown    no   True
```

```
6    man         True    E  Southampton    no   True
7    child       False  NaN  Southampton    no  False
8    woman       False  NaN  Southampton   yes  False
9    child       False  NaN    Cherbourg   yes  False
```

[6]: `titanic.describe()`

[6]:
```
         survived      pclass         age       sibsp       parch        fare
count  891.000000  891.000000  714.000000  891.000000  891.000000  891.000000
mean     0.383838    2.308642   29.699118    0.523008    0.381594   32.204208
std      0.486592    0.836071   14.526497    1.102743    0.806057   49.693429
min      0.000000    1.000000    0.420000    0.000000    0.000000    0.000000
25%      0.000000    2.000000   20.125000    0.000000    0.000000    7.910400
50%      0.000000    3.000000   28.000000    0.000000    0.000000   14.454200
75%      1.000000    3.000000   38.000000    1.000000    0.000000   31.000000
max      1.000000    3.000000   80.000000    8.000000    6.000000  512.329200
```

[7]: `titanic.loc[:,["survived","alive"]]`

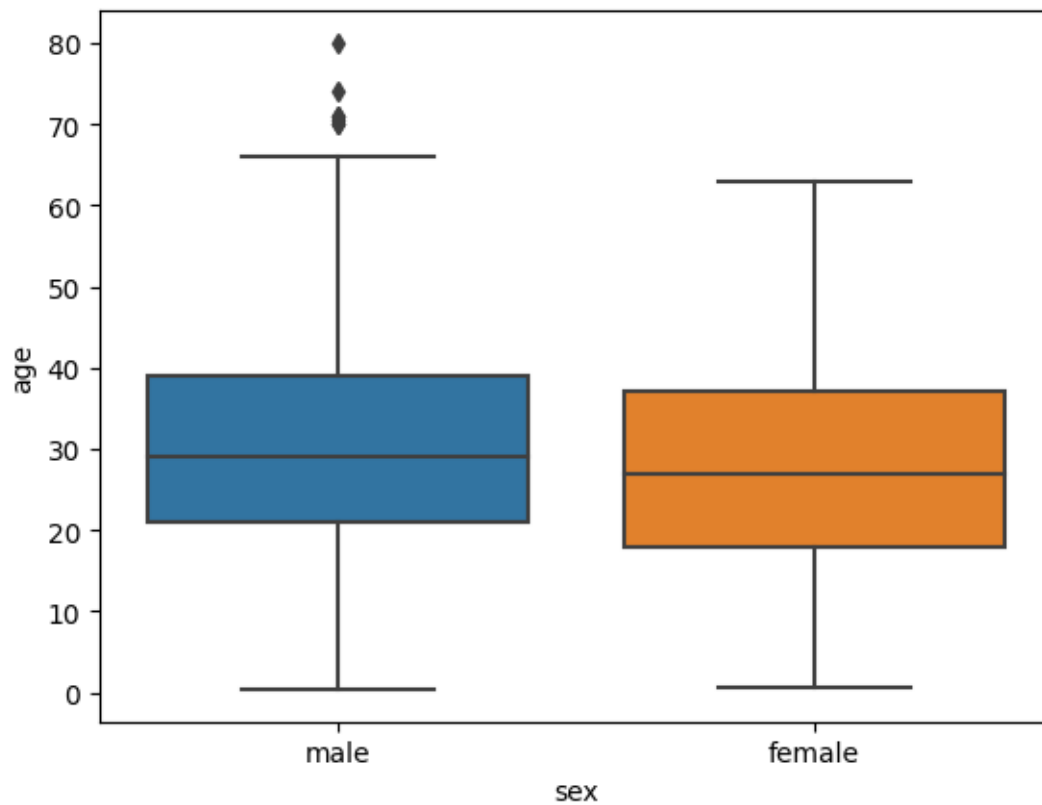[7]:
```
     survived alive
0           0    no
1           1   yes
2           1   yes
3           1   yes
4           0    no
..        ...   ...
886         0    no
887         1   yes
888         0    no
889         1   yes
890         0    no

[891 rows x 2 columns]
```
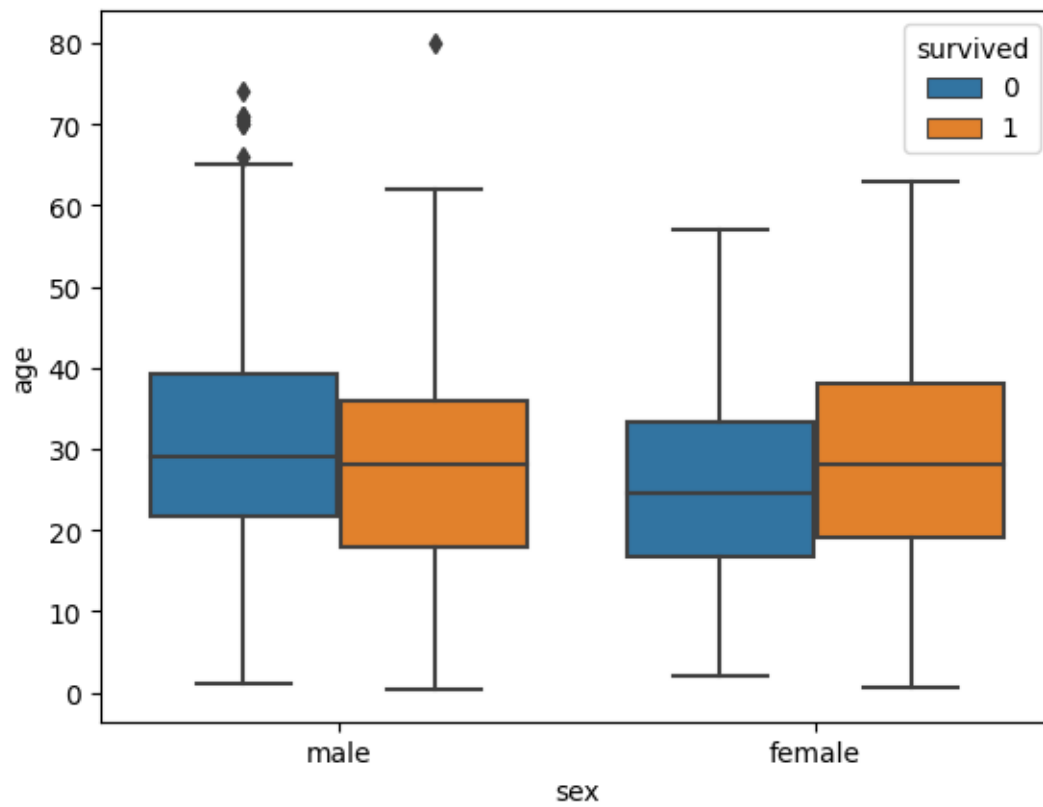
[8]: `sns.boxplot(x="sex",y="age",data=titanic)`

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

```
[9]: sns.boxplot(x="sex",y="age",data=titanic,hue="survived")
```

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

[ ]: