

```
In [ ]: Name:Akash Varade
Roll No: A-04
```

```
In [1]: import seaborn as sns
titanic = sns.load_dataset("titanic")
```

```
In [2]: titanic
```

Out[2]:

| | survived | pclass | sex | age | sibsp | parch | fare | embarked | class | who |
|-----|----------|--------|--------|------|-------|-------|---------|----------|--------|-------|
| 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 |
| 2 | 1 | 3 | female | 26.0 | 0 | 0 | 7.9250 | S | Third | woman |
| 3 | 1 | 1 | female | 35.0 | 1 | 0 | 53.1000 | S | First | woman |
| 4 | 0 | 3 | male | 35.0 | 0 | 0 | 8.0500 | S | Third | man |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 886 | 0 | 2 | male | 27.0 | 0 | 0 | 13.0000 | S | Second | man |
| 887 | 1 | 1 | female | 19.0 | 0 | 0 | 30.0000 | S | First | woman |
| 888 | 0 | 3 | female | NaN | 1 | 2 | 23.4500 | S | Third | woman |
| 889 | 1 | 1 | male | 26.0 | 0 | 0 | 30.0000 | C | First | man |
| 890 | 0 | 3 | male | 32.0 | 0 | 0 | 7.7500 | Q | Third | man |

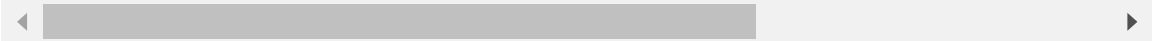
891 rows × 15 columns



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

Out[3]:

| | survived | pclass | sex | age | sibsp | parch | fare | embarked | class | who | adult |
|---|----------|--------|--------|------|-------|-------|---------|----------|--------|-------|-------|
| 0 | 0 | 3 | male | 22.0 | 1 | 0 | 7.2500 | S | Third | man | True |
| 1 | 1 | 1 | female | 38.0 | 1 | 0 | 71.2833 | C | First | woman | True |
| 2 | 1 | 3 | female | 26.0 | 0 | 0 | 7.9250 | S | Third | woman | True |
| 3 | 1 | 1 | female | 35.0 | 1 | 0 | 53.1000 | S | First | woman | True |
| 4 | 0 | 3 | male | 35.0 | 0 | 0 | 8.0500 | S | Third | man | True |
| 5 | 0 | 3 | male | NaN | 0 | 0 | 8.4583 | Q | Third | man | True |
| 6 | 0 | 1 | male | 54.0 | 0 | 0 | 51.8625 | S | First | man | True |
| 7 | 0 | 3 | male | 2.0 | 3 | 1 | 21.0750 | S | Third | child | False |
| 8 | 1 | 3 | female | 27.0 | 0 | 2 | 11.1333 | S | Third | woman | True |
| 9 | 1 | 2 | female | 14.0 | 1 | 0 | 30.0708 | C | Second | child | False |



In [4]: `titanic.info`

Out[4]:

```
<bound method DataFrame.info of
ch      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 [5]: `titanic.describe()`

Out[5]:

| | 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 |

In [6]: `#Custom Columns with all rows`
`titanic.loc[:,["survived","alive"]]`

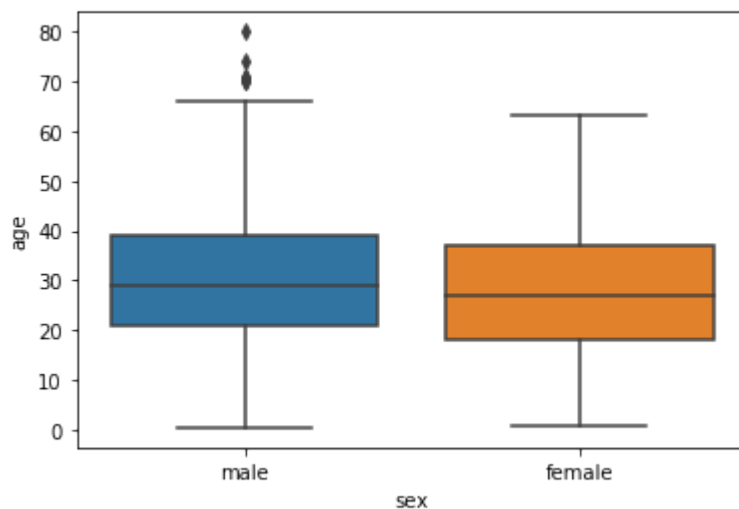
Out[6]:

| | 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 × 2 columns

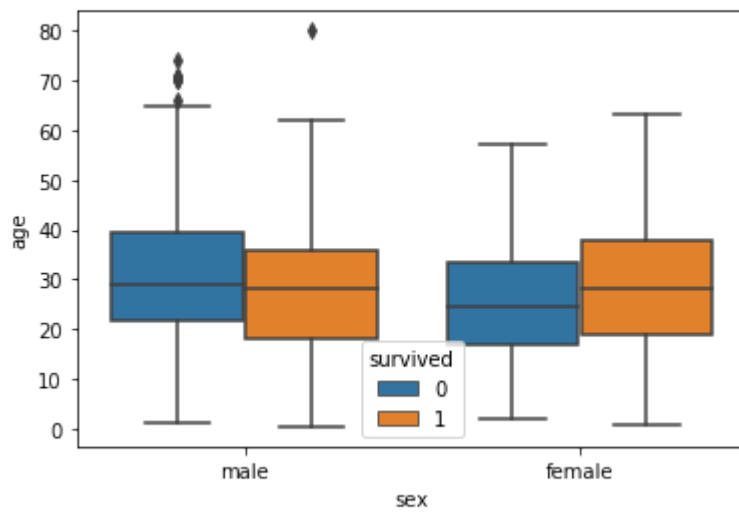
```
In [7]: #Now Plot boxplot
sns.boxplot(x="sex",y="age",data=titanic)
```

Out[7]: <matplotlib.axes._subplots.AxesSubplot at 0x7fabfde47e90>



```
In [8]: sns.boxplot(x="sex",y="age",data=titanic,hue="survived")
```

Out[8]: <matplotlib.axes._subplots.AxesSubplot at 0x7fabfd34ba10>



In []: