## assn9

## May 22, 2023

[1]: #Aishwarya kelgandre Roll no.73 batch T3

[891 rows x 15 columns]

```
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]:
                                                                                    class
           survived
                     pclass
                                  sex
                                         age
                                               sibsp
                                                      parch
                                                                  fare embarked
     0
                   0
                            3
                                 male
                                        22.0
                                                               7.2500
                                                                               S
                                                                                    Third
                                                   1
     1
                   1
                            1
                               female
                                        38.0
                                                   1
                                                           0
                                                              71.2833
                                                                               C
                                                                                    First
     2
                               female
                                        26.0
                                                                               S
                                                                                    Third
                   1
                            3
                                                   0
                                                           0
                                                               7.9250
     3
                   1
                            1
                               female
                                        35.0
                                                   1
                                                           0
                                                              53.1000
                                                                               S
                                                                                    First
     4
                   0
                            3
                                 male
                                        35.0
                                                   0
                                                               8.0500
                                                                               S
                                                                                    Third
     . .
                            2
                  0
                                 male
                                        27.0
                                                           0 13.0000
                                                                                   Second
     886
                                                   0
                                                                               S
                               female
                                        19.0
                                                              30.0000
                                                                                    First
     887
                   1
                            1
                                                   0
     888
                   0
                            3
                               female
                                         NaN
                                                              23.4500
                                                                               S
                                                                                    Third
                                                   1
     889
                                        26.0
                                                   0
                                                              30.0000
                                                                               С
                                                                                    First
                   1
                            1
                                 male
                                                           0
     890
                   0
                            3
                                 male
                                        32.0
                                                   0
                                                               7.7500
                                                                                    Third
                   adult_male deck
                                      embark_town alive
                                                           alone
             who
     0
                         True
                                NaN
                                      Southampton
                                                           False
             man
                                                      no
     1
                        False
                                  C
                                        Cherbourg
                                                           False
           woman
                                                     yes
     2
           woman
                        False
                                NaN
                                      Southampton
                                                     yes
                                                            True
                                      Southampton
     3
           woman
                        False
                                  C
                                                     yes
                                                           False
     4
             man
                         True
                                NaN
                                      Southampton
                                                      no
                                                            True
             man
                         True
                                      Southampton
                                                            True
     886
                                \mathtt{NaN}
                                                      no
     887
                        False
                                      Southampton
                                                            True
           woman
                                  В
                                                     yes
     888
                        False
                                \mathtt{NaN}
                                      Southampton
                                                           False
           woman
                                                      no
     889
                         True
                                  C
                                        Cherbourg
                                                     yes
                                                            True
             man
     890
                         True
                                NaN
                                       Queenstown
                                                            True
             man
                                                      no
```

## titanic.head(10) [3]: [3]: survived pclass sibsp parch fare embarked class sex age 0 0 3 male 22.0 1 0 7.2500 S Third \ 1 1 1 female 38.0 1 0 71.2833 С First 2 1 3 26.0 0 0 7.9250 S Third female S 3 1 1 female 35.0 1 0 53.1000 First 4 0 3 0 0 S Third male 35.0 8.0500 5 0 3 male NaN 0 8.4583 Q Third 6 0 1 male 54.0 0 51.8625 S First 7 0 3 3 21.0750 S Third male 2.0 1 3 0 2 S 8 1 female 27.0 11.1333 Third 9 1 2 female 14.0 1 0 30.0708 C Second who adult\_male deck embark\_town alive alone NaN Southampton 0 man True no False 1 woman False C Cherbourg yes False 2 False NaN woman Southampton True yes 3 woman False C Southampton yes False 4 True NaN Southampton True man no 5 NaN True man True Queenstown no 6 man True Ε Southampton True no 7 child False NaN Southampton False no 8 woman False NaN Southampton False yes child False NaN Cherbourg yes False titanic.head(10) [4]: survived pclass fare embarked class sex age sibsp parch 0 0 7.2500 3 22.0 1 0 S Third male 1 1 1 female 38.0 1 71.2833 С First 2 3 S 1 female 26.0 0 0 7.9250 Third 3 1 1 female 35.0 1 0 53.1000 S First 8.0500 4 0 3 0 S Third male 35.0 0 0 3 0 0 Q Third 5 male NaN 8.4583 6 0 First 1 male 54.0 0 0 51.8625 S 7 0 3 male 3 1 S Third 2.0 21.0750 8 1 3 female 0 11.1333 S Third 27.0 9 2 1 female 14.0 1 30.0708 Second who adult male deck embark\_town alive alone 0 man True NaNSouthampton False no C 1 False Cherbourg False woman yes 2 NaN woman False Southampton yes True 3 False C Southampton False woman ves 4 True NaN Southampton True man no 5 True NaN Queenstown True man no

```
6
                      True
                               Ε
                                  Southampton
                                                        True
          man
                                                  no
     7
        child
                     False
                             NaN
                                  Southampton
                                                       False
                                                  no
     8
        woman
                     False
                             NaN
                                  Southampton
                                                 yes
                                                       False
        child
                     False
                            NaN
                                    Cherbourg
                                                       False
                                                 yes
    titanic.describe()
               survived
                              pclass
                                                         sibsp
                                                                      parch
                                                                                    fare
                                              age
                         891.000000
                                      714.000000
                                                   891.000000
                                                                891.000000
                                                                             891.000000
     count
            891.000000
                            2.308642
                                        29.699118
                                                      0.523008
                                                                               32.204208
     mean
               0.383838
                                                                   0.381594
     std
               0.486592
                            0.836071
                                        14.526497
                                                      1.102743
                                                                   0.806057
                                                                               49.693429
     min
               0.000000
                            1.000000
                                         0.420000
                                                      0.000000
                                                                   0.000000
                                                                                0.00000
     25%
               0.00000
                            2.000000
                                        20.125000
                                                      0.00000
                                                                   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
               1.000000
                            3.000000
                                        80.000000
                                                      8.000000
                                                                   6.000000
                                                                             512.329200
     max
[7]: titanic.loc[:,["survived","alive"]]
          survived alive
     0
                  0
                       no
     1
                  1
                      yes
     2
                  1
                      yes
     3
                  1
                      yes
```

[891 rows x 2 columns]

0

0

1

0

1

no

no

yes

no

yes

no

[6]:

[6]:

[7]:

4

886

887

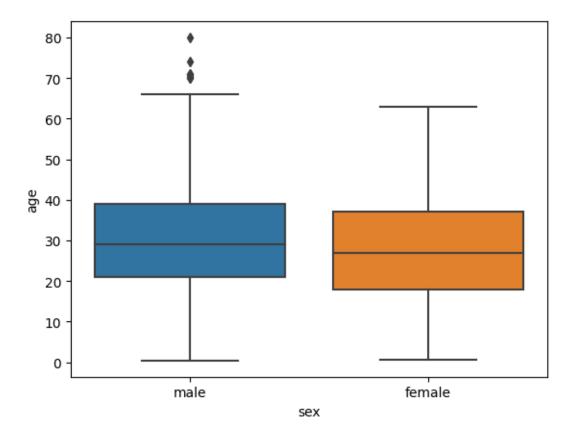
888

889

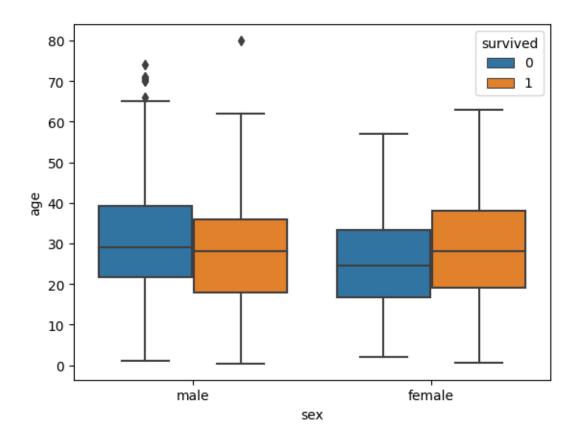
890

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

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



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



[]: