4/23/25, 10:25 PM DSBDA 9

Assignment no.09

```
In [ ]: Aim:
        Use the inbuilt dataset 'titanic' as used in the above problem. Plot a box plot for
         distribution of age with respect to each gender along with the information about wh
         survived or not. (Column names : 'sex' and 'age')
In [ ]: Name:Sneha Navgire
        Roll no:13246
        Batch:B3
        import seaborn as sns
In [1]:
         import matplotlib.pyplot as plt
In [3]: titanic = sns.load_dataset('titanic')
        titanic
Out[3]:
              survived pclass
                                       age sibsp parch
                                                            fare embarked
                                                                               class
                                                                                       who ad
                                 sex
           0
                    0
                            3
                                male
                                      22.0
                                               1
                                                      0
                                                          7.2500
                                                                          S
                                                                              Third
                                                                                       man
           1
                            1 female
                                      38.0
                                                      0 71.2833
                                                                          C
                                                                               First woman
           2
                    1
                            3 female
                                      26.0
                                               0
                                                      0
                                                          7.9250
                                                                          S
                                                                              Third woman
                              female
                                      35.0
                                                      0 53.1000
                                                                               First woman
           4
                    0
                                                0
                            3
                                male
                                      35.0
                                                      0
                                                          8.0500
                                                                          S
                                                                              Third
                                                                                       man
                                                         13.0000
                                                                            Second
         886
                    0
                            2
                                male
                                      27.0
                                               0
                                                                                       man
         887
                            1 female
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                                                                              Third woman
         889
                            1
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                                                                               First
                                                                                       man
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                            3
                                male
                                      32.0
                                               0
                                                      0
                                                         7.7500
                                                                         Q
                                                                              Third
                                                                                       man
        891 rows × 15 columns
In [9]: plt.figure(figsize=(10,6))
         sns.boxplot(x='sex', y='age', hue='survived', data=titanic)
         plt.title('Age Distribution with Respect to Gender and Survival Status')
         plt.xlabel('Gender')
         plt.ylabel('Age')
         # Display the plot
         plt.show()
```

4/23/25, 10:25 PM DSBDA 9

