31444 Mehul

Assignment - 9

```
In [ ]:
          import pandas as pd
          import seaborn as sb
          import matplotlib.pyplot as plt
          import warnings
          warnings.filterwarnings('ignore')
In [ ]:
          data = pd.read csv("titanic.csv")
In [ ]:
          data.head()
Out[]:
            PassengerId Survived Pclass
                                              Name
                                                       Sex
                                                             Age SibSp Parch
                                                                                  Ticket
                                                                                            Far€
                                             Braund,
         0
                       1
                                0
                                        3
                                           Mr. Owen
                                                      male
                                                            22.0
                                                                      1
                                                                             0 A/5 21171
                                                                                           7.2500
                                              Harris
                                           Cumings,
                                           Mrs. John
                                             Bradley
          1
                      2
                                                     female 38.0
                                1
                                                                             0 PC 17599 71.2833
                                           (Florence
                                              Briggs
                                               Th...
                                          Heikkinen,
                                                                                STON/O2.
          2
                      3
                                1
                                               Miss.
                                                     female
                                                            26.0
                                                                                           7.925(
                                                                                 3101282
                                               Laina
                                            Futrelle,
                                               Mrs.
                                            Jacques
          3
                      4
                                1
                                                                                  113803 53.1000
                                                     female 35.0
                                              Heath
                                            (Lily May
                                               Peel)
                                           Allen, Mr.
                                                                                 373450
          4
                      5
                                0
                                        3
                                             William
                                                      male 35.0
                                                                      0
                                                                             0
                                                                                          8.0500
                                              Henry
In [ ]:
          data.drop(columns=["Cabin", "PassengerId", "Name", "Ticket"],inplace=True)
          data.isnull().sum()
                         0
         Survived
Out[]:
         Pclass
                         0
         Sex
                         0
         Age
                       177
         SibSp
                         0
         Parch
                         0
         Fare
                         0
         Embarked
                         2
         dtype: int64
In []:
          data["Age"].fillna(value=data["Age"].median(), inplace=True)
          data["Embarked"] = data["Embarked"].fillna('S')
          data.isnull().sum()
```

```
Survived
                     0
Out[]:
        Pclass
                     0
        Sex
                     0
        Age
                     0
        SibSp
                     0
        Parch
                     0
        Fare
        Embarked
                     0
        dtype: int64
In []:
         data["Age"] = data["Age"].astype("int")
In [ ]:
         data.dtypes
        Survived
                       int64
Out[]:
        Pclass
                       int64
        Sex
                      object
        Age
                       int64
        SibSp
                       int64
        Parch
                       int64
        Fare
                     float64
        Embarked
                      object
        dtype: object
In []:
         sb.boxplot(x='Sex', y='Age', hue="Survived" ,data=data)
```



