04_Titanic_Dataset_Preparation

September 4, 2021

```
import pandas as pd
     import numpy as np
[3]: data = pd.read_csv('./TitanicRawDataset.csv')
     data.head()
[3]:
        pclass
                survived
                                                                         name
                                                                                  sex
             1
                        1
                                              Allen, Miss. Elisabeth Walton
                                                                               female
             1
     1
                        1
                                             Allison, Master. Hudson Trevor
                                                                                 male
     2
             1
                        0
                                               Allison, Miss. Helen Loraine
                                                                               female
     3
             1
                        0
                                       Allison, Mr. Hudson Joshua Creighton
                                                                                 male
     4
             1
                        0
                           Allison, Mrs. Hudson J C (Bessie Waldo Daniels)
                                                                               female
                sibsp
                        parch
                              ticket
                                            fare
                                                     cabin embarked boat body
           age
            29
                     0
                                24160
                                        211.3375
                                                        В5
     0
                            0
                                                                  S
                                                                        2
     1
        0.9167
                     1
                            2
                              113781
                                          151.55
                                                  C22 C26
                                                                  S
                                                                       11
                                                                             ?
     2
             2
                     1
                            2
                              113781
                                          151.55
                                                  C22 C26
                                                                  S
                                                                        ?
                                                                             ?
     3
            30
                            2
                               113781
                                                  C22 C26
                                                                  S
                                                                        ?
                     1
                                          151.55
                                                                           135
                                                                  S
     4
            25
                     1
                               113781
                                          151.55 C22 C26
                               home.dest
     0
                            St Louis, MO
     1 Montreal, PQ / Chesterville, ON
     2 Montreal, PQ / Chesterville, ON
     3 Montreal, PQ / Chesterville, ON
     4 Montreal, PQ / Chesterville, ON
[4]: data = data.replace('?', np.nan)
     data.isnull().sum()
[4]: pclass
                      0
                      0
     survived
                      0
     name
     sex
                      0
     age
                    263
     sibsp
                      0
     parch
                      0
```

```
ticket
                     0
     fare
                     1
     cabin
                  1014
     embarked
                     2
    boat
                   823
    body
                  1188
    home.dest
                   564
    dtype: int64
[5]: def get_first_cabin(row):
         try:
             return row.split()[0]
         except:
             return np.nan
[6]: data['cabin'] = data['cabin'].apply(get_first_cabin)
[7]: data.to_csv('./titanic.csv', index=False)
```