ordinal-encording

April 4, 2024

Import pandas and sklearn

```
[1]: import pandas as pd from sklearn.preprocessing import OrdinalEncoder
```

Read the dataset

```
[3]: data = pd.read_csv('/content/toys.csv')
data
```

```
[3]:
               gender
                                              city has_covid
         age
                       fever
                                 cough
     0
           60
                 Male
                        103.0
                                  Mild
                                          Kolkata
                                                           No
     1
          27
                 Male
                       100.0
                                  Mild
                                             Delhi
                                                          Yes
                 Male
     2
          42
                       101.0
                                 Mild
                                             Delhi
                                                           No
     3
          31
               Female
                         98.0
                                 Mild
                                          Kolkata
                                                           No
          65
               Female
                       101.0
                                 Mild
                                           Mumbai
                                                           No
     95
          12
                       104.0
                                 Mild
                                        Bangalore
               Female
                                                           No
     96
               Female
                       101.0
                                          Kolkata
                                                          Yes
          51
                               Strong
     97
          20
              Female
                       101.0
                                  Mild
                                        Bangalore
                                                           No
     98
               Female
                         98.0
           5
                               Strong
                                           Mumbai
                                                           No
     99
              Female
                         98.0
                               Strong
                                          Kolkata
                                                          Yes
```

[100 rows x 6 columns]

Display the top 5 observations in the dataset

```
[4]: data.head()
```

```
[4]:
                      fever cough
                                       city has_covid
        age
             gender
     0
         60
               Male
                      103.0 Mild
                                   Kolkata
                                                    No
     1
         27
               Male
                      100.0 Mild
                                      Delhi
                                                   Yes
     2
         42
               Male
                      101.0 Mild
                                      Delhi
                                                    No
     3
                                                    No
         31
             Female
                       98.0
                             Mild
                                    Kolkata
     4
         65
             Female
                      101.0 Mild
                                     Mumbai
                                                    No
```

compute the count of unique values in the column named cough

```
[5]: data['cough'].value_counts()
```

```
[5]: cough
      Mild
                62
      Strong
                38
      Name: count, dtype: int64
 []: #mild
      #strong
 [8]: data_Ordinal=data[['cough']]
      data_Ordinal.head()
 [8]: cough
      0 Mild
      1 Mild
      2 Mild
      3 Mild
      4 Mild
 [9]: oe = OrdinalEncoder(categories=[["Mild", "Strong"]])
[10]: oe.fit(data_Ordinal)
[10]: OrdinalEncoder(categories=[['Mild', 'Strong']])
[11]: data_Transform = oe.transform(data_Ordinal)
[12]: data_Transform
[12]: array([[0.],
             [0.],
             [0.],
             [0.],
             [0.],
             [0.],
             [1.],
             [1.],
             [1.],
             [0.],
             [0.],
             [0.],
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             [1.],
             [0.],
             [1.],
             [0.],
```

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              [1.],
              [0.],
              [1.],
              [0.],
              [1.],
              [1.]])
[15]: New_data = pd.DataFrame(data_Transform, columns=['cough'])
[17]: New_data.head()
[17]:
         cough
           0.0
           0.0
      1
      2
           0.0
           0.0
      3
      4
           0.0
[18]: New_data['cough'].value_counts
```

[0.],

```
[18]: <bound method IndexOpsMixin.value_counts of 0
                                                        0.0
           0.0
      1
           0.0
     2
      3
            0.0
      4
           0.0
     95
           0.0
     96
           1.0
           0.0
     97
     98
            1.0
      99
            1.0
     Name: cough, Length: 100, dtype: float64>
```