Open in Colab

```
In [2]:
          import pandas as pd
          df = pd.read_excel("/content/Attribute DataSet (1).xlsx")
          print(df)
                   Dress_ID
                                Style
                                          Price
                                                  Rating
                                                           Size
                                                                  Season
                                                                            NeckLine
                                                      4.6
         0
               1.006033e+09
                                  Sexy
                                             Low
                                                                 Summer
                                                                              o-neck
         1
               1.212192e+09
                               Casual
                                             Low
                                                      0.0
                                                              L
                                                                 Summer
                                                                              o-neck
         2
               1.190381e+09
                              vintage
                                           High
                                                      0.0
                                                                  Automn
                                                                              o-neck
         3
               9.660060e+08
                                Brief
                                        Average
                                                      4.6
                                                              L
                                                                  Spring
                                                                              o-neck
         4
               8.763395e+08
                                  cute
                                             Low
                                                      4.5
                                                              Μ
                                                                 Summer
                                                                              o-neck
                                             . . .
                                   . . .
                                                      . . .
                                                                                 . . .
         495
              7.133920e+08
                                                              Μ
                               Casual
                                             Low
                                                      4.7
                                                                  Spring
                                                                              o-neck
         496
              7.225651e+08
                                  Sexy
                                             Low
                                                      4.3
                                                           free
                                                                  Summer
                                                                              o-neck
         497
               5.328743e+08
                               Casual
                                        Average
                                                      4.7
                                                                  Summer
                                                              Μ
                                                                              v-neck
         498
               6.554649e+08
                               Casual
                                        Average
                                                      4.6
                                                               L
                                                                  winter
                                                                           boat-neck
         499
              9.199310e+08
                               Casual
                                                                 Summer
                                             Low
                                                      4.4
                                                           free
                                                                              v-neck
              SleeveLength waiseline
                                              Material
                                                         FabricType
                                                                      Decoration
         0
                 sleevless
                               empire
                                                   NaN
                                                            chiffon
                                                                          ruffles
         1
                     Petal
                                            microfiber
                                                                          ruffles
                              natural
                                                                 NaN
         2
                      full
                              natural
                                              polyster
                                                                 NaN
                                                                              NaN
         3
                      full
                              natural
                                                  silk
                                                            chiffon
                                                                      embroidary
         4
                 butterfly
                              natural
                                        chiffonfabric
                                                            chiffon
                                                                              bow
                                   . . .
                                                                 . . .
                                                                              . . .
         495
                      full
                              natural
                                              polyster
                                                                 NaN
                                                                              NaN
         496
                      full
                               empire
                                                cotton
                                                                 NaN
                                                                              NaN
         497
                      full
                               empire
                                                cotton
                                                                 NaN
                                                                             lace
         498
                 sleevless
                                                         broadcloth
                                                                        applique
                               empire
                                                  silk
         499
                     short
                               empire
                                                cotton
                                                           Corduroy
                                                                             lace
              Pattern Type
                             Recommendation
         0
                    animal
                                         1.0
         1
                    animal
                                         0.0
         2
                     print
                                         0.0
         3
                     print
                                         1.0
         4
                                         0.0
                        dot
         . .
                        . . .
                                          . . .
         495
                      solid
                                         1.0
         496
                       NaN
                                         0.0
         497
                      solid
                                         1.0
         498
                     print
                                         1.0
         499
                     solid
                                         0.0
         [500 rows x 14 columns]
In [3]:
          print(df.head())
                 Dress ID
                              Style
                                        Price
                                                Rating Size
                                                              Season NeckLine SleeveLength
            1.006033e+09
                               Sexy
                                          Low
                                                   4.6
                                                              Summer
                                                                        o-neck
                                                                                    sleevless
                                                   0.0
                                                              Summer
                                                                                        Petal
         1
            1.212192e+09
                             Casual
                                          Low
                                                                        o-neck
         2
                                                   0.0
                                                                                         full
            1.190381e+09
                            vintage
                                         High
                                                              Automn
                                                                        o-neck
```

9.660060e+08

Q 7633050±00

Brief

cuta

Average

LOW

4.6

15

Spring

Summan

o-neck

o-nack

3

full

huttonflv

LUW

ri Jummei

DUCCELITY

```
waiseline
                            Material FabricType Decoration Pattern Type Recommendati
         on
         0
                                  NaN
                                          chiffon
                                                       ruffles
                                                                       animal
              empire
         1.0
         1
                          microfiber
                                                       ruffles
                                                                       animal
             natural
                                              NaN
         0.0
         2
             natural
                             polyster
                                                           NaN
                                                                       print
                                              NaN
         0.0
         3
             natural
                                 silk
                                          chiffon
                                                    embroidary
                                                                       print
         1.0
             natural chiffonfabric
         4
                                          chiffon
                                                           bow
                                                                          dot
         0.0
In [4]:
          print(df.tail())
                  Dress ID
                              Style
                                        Price
                                               Rating
                                                        Size
                                                               Season
                                                                        NeckLine
              713391965.0
         495
                            Casual
                                          Low
                                                   4.7
                                                           Μ
                                                               Spring
                                                                           o-neck
         496
              722565148.0
                                          Low
                                                   4.3
                                                               Summer
                                                                           o-neck
                               Sexy
                                                        free
              532874347.0
         497
                            Casual
                                     Average
                                                   4.7
                                                           Μ
                                                               Summer
                                                                           v-neck
              655464934.0
         498
                            Casual
                                     Average
                                                   4.6
                                                           L
                                                               winter
                                                                       boat-neck
         499
              919930954.0
                            Casual
                                          Low
                                                   4.4
                                                        free
                                                               Summer
                                                                           v-neck
             SleeveLength waiseline Material FabricType Decoration Pattern Type
         495
                      full
                              natural
                                                                                  solid
                                        polyster
                                                          NaN
                                                                      NaN
         496
                      full
                               empire
                                          cotton
                                                          NaN
                                                                      NaN
                                                                                     NaN
         497
                      full
                               empire
                                          cotton
                                                          NaN
                                                                     lace
                                                                                   solid
         498
                 sleevless
                               empire
                                            silk
                                                  broadcloth
                                                                 applique
                                                                                   print
                                                                     lace
         499
                     short
                               empire
                                          cotton
                                                     Corduroy
                                                                                   solid
               Recommendation
         495
                           1.0
         496
                           0.0
         497
                           1.0
         498
                           1.0
         499
                           0.0
In [5]:
          pd.read csv('https://raw.githubusercontent.com/selva86/datasets/master/Smark
                                                  Lag5 Volume Today Direction
Out[5]:
                Year
                      Lag1
                             Lag2
                                    Lag3
                                           Lag4
               2001
                                                                  0.959
                      0.381
                            -0.192
                                   -2.624
                                          -1.055
                                                  5.010
                                                        1.19130
                                                                              Up
               2001
                      0.959
                             0.381
             1
                                   -0.192 -2.624
                                                 -1.055
                                                        1.29650
                                                                  1.032
                                                                              Up
            2
               2001
                      1.032
                             0.959
                                    0.381
                                          -0.192
                                                 -2.624
                                                        1.41120
                                                                 -0.623
                                                                           Down
             3
               2001
                     -0.623
                             1.032
                                    0.959
                                           0.381
                                                 -0.192
                                                        1.27600
                                                                  0.614
                                                                              Up
               2001
                      0.614
                            -0.623
                                    1.032
                                           0.959
                                                        1.20570
                                                  0.381
                                                                  0.213
                                                                              Up
                                                                              •••
                             0.252
         1245 2005
                      0.422
                                   -0.024
                                          -0.584
                                                 -0.285
                                                        1.88850
                                                                  0.043
                                                                              Up
              2005
                      0.043
         1246
                             0.422
                                    0.252
                                          -0.024
                                                 -0.584
                                                        1.28581
                                                                 -0.955
                                                                           Down
         1247 2005
                     -0.955
                             0.043
                                    0.422
                                           0.252 -0.024
                                                        1.54047
                                                                  0.130
                                                                              Up
```

11/11/22, 9:38 PM

```
pthon 5 week
         1248 2005
                    0.130 -0.955
                                  0.043
                                         0.422
                                               0.252 1.42236 -0.298
                                                                        Down
         1249 2005 -0.298 0.130 -0.955
                                         0.043
                                                0.422 1.38254 -0.489
                                                                        Down
        1250 rows × 9 columns
In [6]:
          df['Recommendation']
                1.0
Out[6]: 0
                0.0
         2
                0.0
         3
                1.0
                0.0
        495
                1.0
                0.0
        496
        497
                1.0
        498
                1.0
        499
                0.0
        Name: Recommendation, Length: 500, dtype: float64
          df[['Rating','Recommendation','Style']]
```

In [7]:

Out[7]:		Rating	Recommendation	Style
	0	4.6	1.0	Sexy
	1	0.0	0.0	Casual
	2	0.0	0.0	vintage
	3	4.6	1.0	Brief
	4	4.5	0.0	cute
	•••			
	495	4.7	1.0	Casual
	496	4.3	0.0	Sexy
	497	4.7	1.0	Casual
	498	4.6	1.0	Casual
	499	4.4	0.0	Casual

500 rows × 3 columns

In [8]: df.describe()

Out[8]: Dress_ID Rating Recommendation **count** 5.000000e+02 500.000000 500.000000 **mean** 9.055417e+08 3.528600 0.420000 **std** 1.736190e+08 2.005364 0.494053

```
min 4.442820e+08
                                 0.000000
                                                   0.000000
                                 3.700000
                                                   0.000000
            25%
                 7.673164e+08
                                 4.600000
            50%
                 9.083296e+08
                                                   0.000000
                 1.039534e+09
                                 4.800000
                                                   1.000000
            75%
            max 1.253973e+09
                                 5.000000
                                                   1.000000
 In [9]:
           (df['Rating']>4.0) & (df['Style']== 'Casual')
 Out[9]:
          0
                  False
          1
                  False
          2
                  False
          3
                  False
          4
                  False
          495
                   True
          496
                  False
          497
                   True
          498
                   True
          499
                   True
          Length: 500, dtype: bool
In [10]:
           df.loc[0:10, ['Dress_ID', 'Style', 'Price', 'Rating']]
Out[10]:
                   Dress_ID
                                Style
                                         Price Rating
           0 1.006033e+09
                                 Sexy
                                          Low
                                                   4.6
            1 1.212192e+09
                               Casual
                                                   0.0
                                          Low
           2 1.190381e+09
                              vintage
                                         High
                                                   0.0
            3 9.660060e+08
                                 Brief Average
                                                   4.6
            4 8.763395e+08
                                                   4.5
                                 cute
                                          Low
            5 1.068332e+09 bohemian
                                          Low
                                                   0.0
            6 1.220707e+09
                               Casual Average
                                                   0.0
           7 1.219677e+09
                              Novelty Average
                                                   0.0
           8 1.113094e+09
                                 Flare Average
                                                   0.0
           9 9.852927e+08 bohemian
                                                   0.0
                                          Low
          10 1.117294e+09
                                party Average
                                                   5.0
In [11]:
           df.iloc[0:5,1:7]
Out[11]:
               Style
                        Price Rating Size
                                            Season NeckLine
                Sexy
                                            Summer
                         Low
                                  4.6
                                                       o-neck
              Casual
                                  0.0
                                           Summer
                         Low
                                                       o-neck
          2 vintage
                        High
                                  0.0
                                         L Automn
                                                       o-neck
```

```
3
               Brief Average
                                4.6
                                            Spring
                                                     o-neck
          4
               cute
                        Low
                                4.5
                                      M Summer
                                                     o-neck
In [12]:
           df.dtypes
                              float64
Out[12]: Dress_ID
                              object
          Style
          Price
                              object
                              float64
          Rating
          Size
                              object
          Season
                              object
          NeckLine
                              object
          SleeveLength
                              object
                              object
          waiseline
          Material
                              object
          FabricType
                              object
          Decoration
                              object
          Pattern Type
                              object
          Recommendation
                             float64
          dtype: object
In [16]:
           df2=df[df.dtypes[(df.dtypes == 'float64') | (df.dtypes == 'int64')] .index]
Out[16]:
                   Dress_ID Rating Recommendation
            0 1.006033e+09
                                4.6
                                                 1.0
            1 1.212192e+09
                                0.0
                                                 0.0
            2 1.190381e+09
                                0.0
                                                 0.0
              9.660060e+08
                                4.6
                                                 1.0
              8.763395e+08
                                4.5
                                                 0.0
                                 ...
                                                  ...
          495 7.133920e+08
                                4.7
                                                 1.0
          496 7.225651e+08
                                4.3
                                                 0.0
          497 5.328743e+08
                                4.7
                                                 1.0
          498 6.554649e+08
                                4.6
                                                 1.0
          499 9.199310e+08
                                4.4
                                                 0.0
         500 rows × 3 columns
In [15]:
           data5 = {'emp_id':[101,102,103,104],
                    'salary':[12,45,53,45],
                    'providentfund':[12312,3432,234,535]}
           df5 = pd.DataFrame(data5)
           print(df5)
```

emp_id salary providentfund

```
0
                101
                          12
                                       12312
          1
                102
                          45
                                        3432
          2
                103
                          53
                                         234
          3
                104
                                         535
                          45
In [14]:
           data6 = {'emp_id': [101,102,103,104],
                   'mobile_no':[12321,3423,2432,2412],
                   'house_no':[12312,234,2344,123]}
           df6 = pd.DataFrame(data6)
           print(df6)
             emp id
                      mobile no
                                 house no
          0
                101
                          12321
                                     12312
          1
                102
                           3423
                                       234
          2
                103
                           2432
                                      2344
          3
                104
                           2412
                                       123
In [18]:
           pd.merge(df6,df5, how = 'left')
Out[18]:
             emp_id mobile_no house_no salary providentfund
          0
                101
                         12321
                                   12312
                                             12
                                                        12312
          1
                102
                          3423
                                     234
                                                         3432
                                             45
          2
                103
                          2432
                                    2344
                                             53
                                                          234
          3
                104
                          2412
                                     123
                                             45
                                                          535
In [17]:
           pd.merge(df6,df5, how = 'right')
             emp_id mobile_no house_no salary providentfund
Out[17]:
          0
                101
                         12321
                                   12312
                                                        12312
                                             12
                          3423
                102
                                     234
                                             45
                                                         3432
          2
                                                          234
                103
                          2432
                                    2344
                                             53
          3
                104
                          2412
                                     123
                                             45
                                                          535
In [19]:
           a=pd.merge(df5,df6)
```