SHABARI PRAKASH SV 21C085

[99 rows x 10 columns]>

Import Pandas and Read/Import Multiple File Format

```
In [ ]:
         import pandas as pd
         READ CSV FILE
         df=pd.read csv('samplecsv.csv')
In [ ]: print(df.head)
       <bound method NDFrame.head of</pre>
                                                    Gender AcademicPerformance TakingNoteInClass
                                             Age
       DepressionStatus \
                                                                             Sometimes
       0
              23
                     Male
                                        Average
                                                                  No
              23
       1
                     Male
                                      Excellent
                                                          Sometimes
                                                                                   Yes
       2
              24
                     Male
                                                                             Sometimes
                                        Average
                                                                  No
       3
              20
                  Female
                                           Good
                                                                 Yes
                                                                             Sometimes
       4
              24
                  Female
                                        Average
                                                                 Yes
                                                                                   Yes
             . . .
                      . . .
                                             . . .
                                                                 . . .
                                                                                    . . .
        . .
                                                                             Sometimes
       94
              21
                     Male
                                           Good
                                                                Yes
       95
                 Female
                                                                                   Yes
              21
                                           Good
                                                                 Yes
              25
                     Male
                                           Good
                                                                             Sometimes
       96
                                                                Yes
       97
              21
                     Male
                                           Good
                                                                Yes
                                                                                     No
       98
              22 Female
                                        Average
                                                                 Yes
                                                                                     No
           FaceChallangesToCompleteAcademicTask LikePresentation
                                                                        SleepPerDayHours
       0
                                                                                        12
                                                Yes
                                                                   Yes
       1
                                                                   Yes
                                                                                         8
                                                 No
       2
                                         Sometimes
                                                                    No
                                                                                         8
                                                                                         5
       3
                                                Yes
                                                                   No
                                                                                         5
       4
                                                Yes
                                                                   Yes
                                                                   . . .
       94
                                                Yes
                                                                   Yes
                                                                                         6
       95
                                                 No
                                                                   Yes
                                                                                         6
       96
                                                                                         4
                                                 No
                                                                   Yes
       97
                                         Sometimes
                                                                                        10
                                                                   No
       98
                                                                                         7
                                                                   Yes
            NumberOfFriend LikeNewThings
       0
                        NaN
                                        Yes
       1
                       80.0
                                        Yes
       2
                       10.0
                                        Yes
       3
                       15.0
                                        Yes
       4
                        2.0
                                        Yes
                         . . .
                                        . . .
       94
                        4.0
                                        Yes
       95
                        6.0
                                        Yes
       96
                        9.0
                                         No
       97
                       23.0
                                        Yes
       98
                        3.0
                                        Yes
```

```
In [ ]: jsondataset=pd.read_json('./samplejson.json')
In [ ]: print(jsondataset.head)
       <bound method NDFrame.head of</pre>
                                            Age Gender AcademicPerformance TakingNoteInClass
       DepressionStatus \
                                                                          Sometimes
             23
                   Male
                                      Average
                                                               No
             23
                                    Excellent
       1
                   Male
                                                        Sometimes
                                                                                 Yes
       2
             24
                   Male
                                      Average
                                                                          Sometimes
                                                               No
       3
             20
                 Female
                                         Good
                                                                          Sometimes
                                                              Yes
       4
             24
                 Female
                                      Average
                                                              Yes
                                                                                 Yes
                                          . . .
                                         Good
       94
             21
                   Male
                                                              Yes
                                                                          Sometimes
       95
             21
                Female
                                         Good
                                                              Yes
                                                                                 Yes
       96
             25
                   Male
                                         Good
                                                              Yes
                                                                          Sometimes
                                         Good
       97
             21
                   Male
                                                              Yes
                                                                                  No
       98
             22 Female
                                      Average
                                                              Yes
                                                                                  No
           FaceChallangesToCompleteAcademicTask LikePresentation
                                                                       SleepPerDayHours
       0
                                               Yes
                                                                                      12
       1
                                                No
                                                                 Yes
                                                                                       8
       2
                                                                                       8
                                        Sometimes
                                                                  No
       3
                                                                                       5
                                               Yes
                                                                  No
       4
                                               Yes
                                                                                       5
                                                                 Yes
                                               . . .
                                                                  . . .
        . .
       94
                                               Yes
                                                                 Yes
                                                                                       6
       95
                                                                                       6
                                                No
                                                                 Yes
       96
                                                                                       4
                                                No
                                                                 Yes
       97
                                                                                      10
                                        Sometimes
                                                                  No
       98
                                                No
                                                                 Yes
                                                                                       7
           NumberOfFriend LikeNewThings
       0
                                      Yes
                        80
                                      Yes
       1
       2
                        10
                                      Yes
       3
                        15
                                      Yes
       4
                         2
                                      Yes
                                      . . .
       94
                         4
                                      Yes
       95
                         6
                                      Yes
       96
                         9
                                       No
       97
                        23
                                      Yes
       98
                         3
                                      Yes
       [99 rows x 10 columns]>
         READ EXCEL FILE
         xsldata=pd.read_excel('./sampleexcel.xlsx')
        print(xsldata.head)
```

```
Gender AcademicPerformance TakingNoteInClass
<bound method NDFrame.head of</pre>
                                   Age
DepressionStatus \
0
      23
                                                                   Sometimes
             Male
                               Average
                                                         No
1
      23
                             Excellent
                                                 Sometimes
            Male
                                                                          Yes
2
      24
             Male
                               Average
                                                        No
                                                                   Sometimes
3
      20
         Female
                                                       Yes
                                                                    Sometimes
                                  Good
4
      24
          Female
                               Average
                                                       Yes
                                                                          Yes
     . . .
              . . .
                                    . . .
                                                       . . .
                                                                          . . .
. .
                                  Good
                                                                    Sometimes
94
      21
            Male
                                                       Yes
95
      21 Female
                                                                          Yes
                                  Good
                                                       Yes
                                  Good
96
      25
            Male
                                                       Yes
                                                                   Sometimes
97
      21
            Male
                                  Good
                                                       Yes
                                                                           No
98
      22 Female
                               Average
                                                       Yes
                                                                           No
   FaceChallangesToCompleteAcademicTask LikePresentation SleepPerDayHours
0
                                       Yes
                                                         Yes
                                                                              12
1
                                                         Yes
                                                                                8
                                        No
2
                                Sometimes
                                                                                8
                                                          No
                                                                                5
3
                                       Yes
                                                          No
4
                                       Yes
                                                         Yes
                                                                                5
                                       . . .
                                                          . . .
94
                                       Yes
                                                         Yes
                                                                                6
95
                                                                                6
                                        No
                                                         Yes
96
                                                                               4
                                        No
                                                         Yes
97
                                Sometimes
                                                          No
                                                                              10
98
                                        No
                                                         Yes
                                                                                7
    NumberOfFriend LikeNewThings
0
                NaN
                               Yes
1
               80.0
                               Yes
2
               10.0
                               Yes
3
               15.0
                               Yes
4
                2.0
                               Yes
                . . .
                               . . .
94
                4.0
                               Yes
95
                6.0
                               Yes
96
                9.0
                                No
97
               23.0
                               Yes
98
                3.0
                               Yes
[99 rows x 10 columns]>
```

33 10M3 X 10 CO14MM3],

CONVERT TO PANDAS DATAFRAME

```
In [ ]: df=pd.DataFrame(df)
    df
```

Out[]:		Age	Gender	AcademicPerformance	TakingNoteInClass	DepressionStatus	FaceChallan
	0	23	Male	Average	No	Sometimes	
	1	23	Male	Excellent	Sometimes	Yes	
	2	24	Male	Average	No	Sometimes	
	3	20	Female	Good	Yes	Sometimes	
	4	24	Female	Average	Yes	Yes	
	•••		***			•••	
	94	21	Male	Good	Yes	Sometimes	
	95	21	Female	Good	Yes	Yes	
	96	25	Male	Good	Yes	Sometimes	
	97	21	Male	Good	Yes	No	
	98	22	Female	Average	Yes	No	
	99 rc	ows x	10 colum	ns			

CHECK FOR NULL VALUES

In []: df.isnull()

Out[]:		Age	Gender	AcademicPerformance	TakingNoteInClass	DepressionStatus	FaceChallan
	0	False	False	False	False	False	
	1	False	False	False	False	False	
	2	False	False	False	False	False	
	3	False	False	False	False	False	
	4	False	False	False	False	False	
	•••	•••	•••				
	94	False	False	False	False	False	
	95	False	False	False	False	False	
	96	False	False	False	False	False	
	97	False	False	False	False	False	
	98	False	False	False	False	False	

99 rows × 10 columns

SHOW NULL VALUES IN EACH ATTRIBUTE

```
In [ ]: df.isnull().sum()
Out[]: Age
                                                 0
        Gender
                                                 0
        AcademicPerformance
                                                 0
                                                 0
        TakingNoteInClass
        DepressionStatus
                                                 0
        FaceChallangesToCompleteAcademicTask
                                                 0
        LikePresentation
                                                 0
        SleepPerDayHours
                                                 0
        NumberOfFriend
                                                 4
        LikeNewThings
                                                 0
        dtype: int64
        FOR FILLING THE NULL VALUES, FIND MEAN
In [ ]: nooffmean=df['NumberOfFriend'].mean()
        nooffmean
Out[]: 16.189473684210526
        FILL NULL VALUES WITH MEAN VALUE
In [ ]: df.fillna({'NumberOfFriend':nooffmean},inplace=True)
        NOW CHECK FOR NULL VALUES
In [ ]: df.isnull().sum()
Out[]: Age
                                                 0
        Gender
                                                 0
        AcademicPerformance
                                                 0
        TakingNoteInClass
                                                 0
        DepressionStatus
                                                 0
        FaceChallangesToCompleteAcademicTask
                                                 0
        LikePresentation
                                                 0
        SleepPerDayHours
                                                 0
        NumberOfFriend
                                                 0
        LikeNewThings
                                                 0
        dtype: int64
        EXPORT THE PROCESSED DATAFRAME TO OTHER FORMATS - CSV, JSON, EXCEL, HDF
In [ ]: df.to_csv('./ProcessedDataset/ExportCSV.csv',index=True)
In [ ]: df.to_json('./ProcessedDataset/ExportJSON.json')
        df.to excel('./ProcessedDataset/ExportXSL.xlsx')
        df.to_hdf('./ProcessedDataset/ExportHDF.h5',key='df',mode='a')
```