

```
# 1.) Importing the necessary files.

import pandas as pd

# 2.) Loading dataset.

df = pd.read_csv("/content/Student_performance_data_.csv")

# 3.) Information about the dataset.

print("First 5 rows of the dataset.")
print(df.head())

print("Shape of the dataset i.e. Rows and Columns.")
print(df.shape)

print("Name of the columns.")
print(df.columns)

print("Dataset info.")
print(df.info())

print(df.head(10))

print("Statistical summary.")
print(df.describe())

print("Missing values in each column.")
print(df.isnull().sum())

print("Correlation between features.")
print(df.corr(numeric_only=True))
```

First 5 rows of the dataset.

	StudentID	Age	Gender	Ethnicity	ParentalEducation	StudyTimeWeekly
0	1001	17	1	0	2	19.833723
1	1002	18	0	0	1	15.408756
2	1003	15	0	2	3	4.210570
3	1004	17	1	0	3	10.028829
4	1005	17	1	0	2	4.672495

	Absences	Tutoring	ParentalSupport	Extracurricular	Sports	Music
0	7	1	2	0	0	1
1	0	0	1	0	0	0
2	26	0	2	0	0	0
3	14	0	3	1	0	0
4	17	1	3	0	0	0

Volunteering      GPA    GradeClass

0	0	2.929196	2.0
1	0	3.042915	1.0
2	0	0.112602	4.0
3	0	2.054218	3.0
4	0	1.288061	4.0

Shape of the dataset i.e. Rows and Columns.

(2392, 15)

Name of the columns.

```
Index(['StudentID', 'Age', 'Gender', 'Ethnicity', 'ParentalEducation',
       'StudyTimeWeekly', 'Absences', 'Tutoring', 'ParentalSupport',
       'Extracurricular', 'Sports', 'Music', 'Volunteering', 'GPA',
       'GradeClass'],
      dtype='object')
```

Dataset info.

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 2392 entries, 0 to 2391
Data columns (total 15 columns):
 #   Column           Non-Null Count  Dtype  
 --- 
 0   StudentID        2392 non-null   int64  
 1   Age              2392 non-null   int64  
 2   Gender            2392 non-null   int64  
 3   Ethnicity         2392 non-null   int64  
 4   ParentalEducation 2392 non-null   int64  
 5   StudyTimeWeekly   2392 non-null   float64 
 6   Absences          2392 non-null   int64  
 7   Tutoring          2392 non-null   int64  
 8   ParentalSupport   2392 non-null   int64  
 9   Extracurricular    2392 non-null   int64  
 10  Sports             2392 non-null   int64  
 11  Music              2392 non-null   int64  
 12  Volunteering      2392 non-null   int64  
 13  GPA                2392 non-null   float64 
 14  GradeClass         2392 non-null   float64 
```

```
dtypes: float64(3), int64(12)
memory usage: 280.4 KB
None
   StudentID  Age  Gender  Ethnicity  ParentalEducation  StudyTimeWeekly \
0        1001    17       1          0                  2           19.833723
1        1002    18       0          0                  1           15.408756
2        1003    15       0          2                  3            4.210570
3        1004    17       1          0                  2           19.833723
```