

```
In [2]: import pandas as pd
import numpy as np
```

```
In [5]: data=pd.read_csv("student_data.csv")
data
```

Out[5]:

	gender	race/ethnicity	parental level of education	lunch	test preparation course	math score	reading score	writing score
0	female	group B	bachelor's degree	standard	none	72	72	74
1	female	group C	some college	standard	completed	69	90	88
2	female	group B	master's degree	standard	none	90	95	93
3	male	group A	associate's degree	free/reduced	none	47	57	44
4	male	group C	some college	standard	none	76	78	75
...
995	female	group E	master's degree	standard	completed	88	99	95
996	male	group C	high school	free/reduced	none	62	55	55
997	female	group C	high school	free/reduced	completed	59	71	65
998	female	group D	some college	standard	completed	68	78	77
999	female	group D	some college	free/reduced	none	77	86	86

1000 rows × 8 columns

```
In [7]: data.head()
```

Out[7]:

	gender	race/ethnicity	parental level of education	lunch	test preparation course	math score	reading score	writing score
0	female	group B	bachelor's degree	standard	none	72	72	74
1	female	group C	some college	standard	completed	69	90	88
2	female	group B	master's degree	standard	none	90	95	93
3	male	group A	associate's degree	free/reduced	none	47	57	44
4	male	group C	some college	standard	none	76	78	75

In [8]: `data.tail()`

Out[8]:

	gender	race/ethnicity	parental level of education	lunch	test preparation course	math score	reading score	writing score
995	female	group E	master's degree	standard	completed	88	99	95
996	male	group C	high school	free/reduced	none	62	55	55
997	female	group C	high school	free/reduced	completed	59	71	65
998	female	group D	some college	standard	completed	68	78	77
999	female	group D	some college	free/reduced	none	77	86	86

In [10]: `data.shape`

Out[10]: (1000, 8)

In [13]: `data.describe()`

Out[13]:

	math score	reading score	writing score
count	1000.00000	1000.000000	1000.000000
mean	66.08900	69.169000	68.054000
std	15.16308	14.600192	15.195657
min	0.00000	17.000000	10.000000
25%	57.00000	59.000000	57.750000
50%	66.00000	70.000000	69.000000
75%	77.00000	79.000000	79.000000
max	100.00000	100.000000	100.000000

In [14]: `data.columns`

Out[14]: Index(['gender', 'race/ethnicity', 'parental level of education', 'lunch', 'test preparation course', 'math score', 'reading score', 'writing score'], dtype='object')

```
In [15]: data.nunique()
```

```
Out[15]: gender                2  
         race/ethnicity        5  
         parental level of education  6  
         lunch                 2  
         test preparation course  2  
         math score            81  
         reading score         72  
         writing score          77  
         dtype: int64
```

```
In [16]: data['gender'].unique()
```

```
Out[16]: array(['female', 'male'], dtype=object)
```

```
In [17]: data['race/ethnicity'].unique()
```

```
Out[17]: array(['group B', 'group C', 'group A', 'group D', 'group E'],  
              dtype=object)
```