```
from google.colab import drive

drive.mount('/content/gdive')
```

```
Mounted at /content/gdive
```

```
import pandas as pd
df = pd.read_csv('/content/gdive/MyDrive/school_scores.csv')

#Task 1
df
```

	Year	State.Code	State.Name	Total.Math	Total.Test-takers	Total.Verbal	Academic Subjects.Arts/Music.Average GPA	Academic Subjects.Arts/Music.Average Years	Subj
0	2005	AL	Alabama	559	3985	567	3.92	2.2	
1	2005	AK	Alaska	519	3996	523	3.76	1.9	
2	2005	AZ	Arizona	530	18184	526	3.85	2.1	
3	2005	AR	Arkansas	552	1600	563	3.90	2.2	
4	2005	CA	California	522	186552	504	3.76	1.8	
...	...	...	...	...	...	...	...	...	
572	2015	VA	Virginia	517	59621	518	3.83	2.1	
573	2015	WA	Washington	511	44423	502	3.83	2.2	
574	2015	WV	West Virginia	500	2501	509	3.92	2.4	
575	2015	WI	Wisconsin	606	2277	591	3.93	2.6	
576	2015	WY	Wyoming	587	181	588	3.91	2.5	

577 rows × 99 columns

```
#Task 2
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 577 entries, 0 to 576
Data columns (total 99 columns):
 #   Column                                          Non-Null Count  Dtype
---  ------                                          --------------  -----
 0   Year                                            577 non-null    int64
 1   State.Code                                      577 non-null    object
 2   State.Name                                      577 non-null    object
 3   Total.Math                                      577 non-null    int64
 4   Total.Test-takers                               577 non-null    int64
 5   Total.Verbal                                    577 non-null    int64
 6   Academic Subjects.Arts/Music.Average GPA        577 non-null    float64
 7   Academic Subjects.Arts/Music.Average Years      577 non-null    float64
 8   Academic Subjects.English.Average GPA           577 non-null    float64
 9   Academic Subjects.English.Average Years         577 non-null    float64
 10  Academic Subjects.Foreign Languages.Average GPA 577 non-null    float64
 11  Academic Subjects.Foreign Languages.Average Years 577 non-null  float64
 12  Academic Subjects.Mathematics.Average GPA       577 non-null    float64
 13  Academic Subjects.Mathematics.Average Years     577 non-null    float64
 14  Academic Subjects.Natural Sciences.Average GPA  577 non-null    float64
 15  Academic Subjects.Natural Sciences.Average Years 577 non-null   float64
 16  Academic Subjects.Social Sciences/History.Average GPA 577 non-null float64
 17  Academic Subjects.Social Sciences/History.Average Years 577 non-null float64
 18  Family Income.Between 20-40k.Math               577 non-null    int64
 19  Family Income.Between 20-40k.Test-takers        577 non-null    int64
 20  Family Income.Between 20-40k.Verbal             577 non-null    int64
 21  Family Income.Between 40-60k.Math               577 non-null    int64
 22  Family Income.Between 40-60k.Test-takers        577 non-null    int64
 23  Family Income.Between 40-60k.Verbal             577 non-null    int64
 24  Family Income.Between 60-80k.Math               577 non-null    int64
 25  Family Income.Between 60-80k.Test-takers        577 non-null    int64
 26  Family Income.Between 60-80k.Verbal             577 non-null    int64
 27  Family Income.Between 80-100k.Math              577 non-null    int64
 28  Family Income.Between 80-100k.Test-takers       577 non-null    int64
```

```
 29  Family Income.Between 80-100k.Verbal                577 non-null    int64
 30  Family Income.Less than 20k.Math                    577 non-null    int64
 31  Family Income.Less than 20k.Test-takers             577 non-null    int64
 32  Family Income.Less than 20k.Verbal                  577 non-null    int64
 33  Family Income.More than 100k.Math                   577 non-null    int64
 34  Family Income.More than 100k.Test-takers            577 non-null    int64
 35  Family Income.More than 100k.Verbal                 577 non-null    int64
 36  GPA.A minus.Math                                    577 non-null    int64
 37  GPA.A minus.Test-takers                             577 non-null    int64
 38  GPA.A minus.Verbal                                  577 non-null    int64
 39  GPA.A plus.Math                                     577 non-null    int64
 40  GPA.A plus.Test-takers                              577 non-null    int64
 41  GPA.A plus.Verbal                                   577 non-null    int64
 42  GPA.A.Math                                          577 non-null    int64
 43  GPA.A.Test-takers                                   577 non-null    int64
 44  GPA.A.Verbal                                        577 non-null    int64
 45  GPA.B.Math                                          577 non-null    int64
 46  GPA.B.Test-takers                                   577 non-null    int64
 47  GPA.B.Verbal                                        577 non-null    int64
 48  GPA.C.Math                                          577 non-null    int64
 49  GPA.C.Test-takers                                   577 non-null    int64
 50  GPA.C.Verbal                                        577 non-null    int64
 51  GPA.D or lower.Math                                 577 non-null    int64
 52  GPA.D or lower.Test-takers                          577 non-null    int64
```

```
#Task 3--
df.describe(include='all')
```

	Year	State.Code	State.Name	Total.Math	Total.Test-takers	Total.Verbal	Sub
count	577.000000	577	577	577.000000	577.000000	577.000000	
unique	NaN	53	53	NaN	NaN	NaN	
top	NaN	AL	Alabama	NaN	NaN	NaN	
freq	NaN	11	11	NaN	NaN	NaN	
mean	2010.019064	NaN	NaN	535.682842	27914.242634	531.334489	
std	3.169623	NaN	NaN	46.171611	45602.106878	44.318302	
min	2005.000000	NaN	NaN	383.000000	134.000000	401.000000	
25%	2007.000000	NaN	NaN	504.000000	2536.000000	496.000000	
50%	2010.000000	NaN	NaN	527.000000	6468.000000	522.000000	
75%	2013.000000	NaN	NaN	571.000000	35799.000000	572.000000	
max	2015.000000	NaN	NaN	619.000000	241553.000000	612.000000	

11 rows × 99 columns

```
#Task 4--
df.isnull()
```

	Year	State.Code	State.Name	Total.Math	Total.Test-takers	Total.Verbal	Subjects.Arts,
0	False	False	False	False	False	False	
1	False	False	False	False	False	False	
2	False	False	False	False	False	False	
3	False	False	False	False	False	False	
4	False	False	False	False	False	False	
...	...	...	...	...	...	...	
572	False	False	False	False	False	False	
573	False	False	False	False	False	False	
574	False	False	False	False	False	False	
575	False	False	False	False	False	False	
576	False	False	False	False	False	False	

577 rows × 99 columns