

4.7.4 Get the Total Budget

Since you successfully found the total number of schools, Maria has asked you to calculate the total budget for the whole district.

If we were working in Excel, we could find the sum of the "budget" column using the `=sum()` function on `schools_complete.csv` like this:

=SUM(E2:E16)	
D	E
size	budget
2917	1910635
2949	1884411
1761	1056600
4635	3022020
1468	917500
2283	1319574
1858	1081356
4976	3124928
427	248087
962	585858
1800	1049400
3999	2547363
4761	3094650
2739	1763916
1635	1043130
	24649428

Since we're using Pandas, we can use the `sum()` method on the "budget" column.

Look at `school_data_complete_df`. Notice that each student is associated with a school and all the data related to that school, including type, size, and budget:

	Student ID	student_name	gender	grade	school_name	reading_score	math_score	School ID	type	size	budget
0	0	Paul Bradley	M	9th	Huang High School	66	79	0	District	2917	1910635
1	1	Victor Smith	M	12th	Huang High School	94	61	0	District	2917	1910635
2	2	Kevin Rodriguez	M	12th	Huang High School	90	60	0	District	2917	1910635
3	3	Richard Scott	M	12th	Huang High School	67	58	0	District	2917	1910635
4	4	Bonnie Ray	F	9th	Huang High School	97	84	0	District	2917	1910635

When we apply the `sum()` method on the "budget" column of the `school_data_complete_df` DataFrame, we get the following output:

```
# Calculate the Total Budget.  
total_budget = school_data_complete_df["budget"].sum()  
total_budget  
  
82932329558
```

This is a huge number, and based on our Excel calculation, it's incorrect. Our code summed all 39,170 rows in the "budget" column.

Instead of using the `sum()` method on the "budget" column of the `school_data_complete_df` DataFrame, we can apply the `sum()` method on the "budget" column of the `school_data_df` DataFrame.

Add the following code to a new cell and run the cell.

```
# Calculate the total budget.  
total_budget = school_data_df["budget"].sum()  
total_budget
```

FINDING

The total budget of the schools in the district is \$24,649,428. Your output should match the sum of **E3:E16** in the **schools_complete.csv** file. This is a good way to check that our answer matches the CSV file.

```
# Calculate the Total Budget.  
total_budget = school_data_df["budget"].sum()  
total_budget  
  
24649428
```