In homework 4 we are analyzed district-wide standardized test results using two datasets; school_data and student_data. From this, we aggregated the data to showcase obvious trends in school performance.

The first observation I noticed is that relative to the their district school counterparts, the charter schools had significantly fewer total students. This can be seen in the school summary table:

school_name	School Type	Total Students	Total School Budget	Per Student Budget	Average Math Score	Average Reading Score	% Passing Math	% Passing Reading	% Overall Passing
Bailey High School	District	4976	$3,124,928.00	628.0	77.048432	81.033963	66.680064	81.933280	54.642283
Cabrera High School	Charter	1858	$1,081,356.00	582.0	83.061895	83.975780	94.133477	97.039828	91.334769
Figueroa High School	District	2949	$1,884,411.00	639.0	76.711767	81.158020	65.988471	80.739234	53.204476
Ford High School	District	2739	$1,763,916.00	644.0	77.102592	80.746258	68.309602	79.299014	54.289887
Griffin High School	Charter	1468	$917,500.00	625.0	83.351499	83.816757	93.392371	97.138965	90.599455
Hernandez High School	District	4635	$3,022,020.00	652.0	77.289752	80.934412	66.752967	80.862999	53.527508
Holden High School	Charter	427	$248,087.00	581.0	83.803279	83.814988	92.505855	96.252927	89.227166
Huang High School	District	2917	$1,910,635.00	655.0	76.629414	81.182722	65.683922	81.316421	53.513884
Johnson High School	District	4761	$3,094,650.00	650.0	77.072464	80.966394	66.057551	81.222432	53.539172
Pena High School	Charter	962	$585,858.00	609.0	83.839917	84.044699	94.594595	95.945946	90.540541
Rodriguez High School	District	3999	$2,547,363.00	637.0	76.842711	80.744686	66.366592	80.220055	52.988247
Shelton High School	Charter	1761	$1,056,600.00	600.0	83.359455	83.725724	93.867121	95.854628	89.892107
Thomas High School	Charter	1635	$1,043,130.00	638.0	83.418349	83.848930	93.272171	97.308869	90.948012
Wilson High School	Charter	2283	$1,319,574.00	578.0	83.274201	83.989488	93.867718	96.539641	90.582567
Wright High School	Charter	1800	$1,049,400.00	583.0	83.682222	83.955000	93.333333	96.611111	90.333333

The second observation I noticed was that the highest performing schools were all charters as seen in the Highest-Performing Schools (by % Overall Passing) table:

Highest-Performing Schools (by % Overall Passing)

```
[87]: # Sort the schools by `% Overall Passing` in descending order and display the top 5 rows.
      top_schools = per_school_summary.sort_values(by="% Overall Passing", ascending=False)
      top_schools.head(5)
```

[87]: school_name	School Type	Total Students	Total School Budget	Per Student Budget	Average Math Score	Average Reading Score	% Passing Math	% Passing Reading	% Overall Passing
Cabrera High School	Charter	1858	$1,081,356.00	582.0	83.061895	83.975780	94.133477	97.039828	91.334769
Thomas High School	Charter	1635	$1,043,130.00	638.0	83.418349	83.848930	93.272171	97.308869	90.948012
Griffin High School	Charter	1468	$917,500.00	625.0	83.351499	83.816757	93.392371	97.138965	90.599455
Wilson High School	Charter	2283	$1,319,574.00	578.0	83.274201	83.989488	93.867718	96.539641	90.582567
Pena High School	Charter	962	$585,858.00	609.0	83.839917	84.044699	94.594595	95.945946	90.540541