Impact of Class Size on Test Scores
By Adam Smith and David Ricardo

1. Clearly specify what your research question is.

    - *How does class size affect the academic performance of elementary school students?*

2. Why do you think this question is interesting or important?

    - *This is an important question as it informs policymakers of the value of mandating maximum class sizes. Since substantial costs are associated with reducing class sizes across schools, quantifying its benefits can help policymakers make more informed decisions.*

      This question is also significant as it pertains to equity in education. Larger class sizes may disproportionately impact schools in under-resourced communities, indicating that if reducing class sizes proves effective in enhancing quality, such measures could play a crucial role in equalizing educational opportunities.

3. Fill in the following table. Use the names of the variables in the dataset.

	Name	**Description**
Name of your dataset	*caschools.csv*	*Data on school characteristics and test performance for 420 school districts in California from 1998-99.*
Dependent variable	*testscr*	*Average reading and writing score*
Independent variable	*str*	*Student-teacher ratio*
Control variables	*high_comp_stu**	*Binary variable that takes value 1 if computers per student are above the median, and 0 otherwise*
	meal_pct	*Percent of students qualifying for reduced-price lunch*

   *We will create this variable using *comp_stu (computers per student).*

4. How do you think the primary independent variable correlates with the dependent variable? Explain the reasoning behind your thinking.

    - *We think that there should be a negative correlation between test scores and the student-teacher ratio. That is, a higher student-teacher ratio should lead to worse student performance as each student is not getting much individual attention in the class.*

5. Fill the following table with the *expected* sign of the correlation between different variables.

	Computers per student>median	Reduced-price lunch
Test score	+	-
Student-teacher ratio	-	+