## Step 1: Ask Questions

A problem statement is a detailed description of a problem or an issue that a project seeks to address.

The problem statement can grow and change as you explore what data is available. In fact, you can look at possible data sets to help you decide on what issue or problem to explore further.

Your problem statement will be the guiding issue for your statistical question(s).

**Example Problem Statement:**

* Tech companies are typically lacking in efforts to promote inclusion and diversity.

**Example Statistical Questions:**

* What are the gender and race breakdowns in tech companies?
* Which tech company is the most diverse? Least diverse?
* How does each company’s workforce compare to the United States population as a whole?
* How does each company’s workforce compare to the population of the city in which it is located?

**Your Turn:**

* Explore online databases for inspiration:  
  – <https://www.kaggle.com/>– <https://www.wolframalpha.com/>– <https://www.gapminder.org/data/>
* Brainstorm and write down at least three possible problems that you would like to explore further.
* Formulate at least two statistical questions for each problem.

1. Problem Statement One

a. Statistical Question One

b. Statistical Question Two

2. Problem Statement Two

a. Statistical Question One

b. Statistical Question Two

3. Problem Statement Three

a. Statistical Question One

b. Statistical Question Two