

# Assignment 11: Hash Tables

## Software Engineering for Scientists

**Objectives:** Become familiar with hash tables as a means of integrating data.

**Tasks:**

1. This assignment will build off of assignment 8, so please use that repo.
2. Using test driven development
  - a. Develop your own hash table data structure that can insert and retrieve key value pairs
    - i. Write your own hashing function
    - ii. Write your own collision handling methods
    - iii. YOU DO NOT HAVE TO IMPLEMENT rehashing.
  - b. Update your `get_data` function to retrieve rows from a data file and return them as hash tables where the keys are the header row names
  - c. Update `get_fire_gdp_year_data` and other functions to use this new data structure.
3. Add a sections to your README that
  - a. Describe your hash table
  - b. Validated that your results with this new data structure match those that used search.
4. Create a release from master tagged as 2.0