Linear Search

When you're finished, type `make run` in the Console tab, and enter in some last names to search for. Here's what happens when I run the program.

- I start with **Thompson**, the **first name** in the file, so the program **immediately finds and prints** the answer, displaying only two "dots" before the answer.

- When I look for **Gilbert**, the program needs to look through a little more than half of the array before finding **Roger Gilbert**.

- When I look for **Smith**, surprisingly there are no Smiths in the directory. The program has to look through every single element before it can report the fact that it failed.

So, what conclusions can we make from this experiment?