Top-Down Dev & Assert EXERCISES

Work with your neighbor.

1. Write the conceptual decomposition for reading the file on slide 26.

   Each line of the input file is has the form:

   ```
   Sue Hansen, CSC 110:B, CSC 120:B, CSC 245:A, CSC 337:B
   ```

2. Write an initial version of the code to implement the conceptual decomposition on slide 40. Don't go as far as code that builds lists or tuples to hold data.

3. Write `assert` statements to enforce the following:

    a. `x > y`

    b. `word` is a key in the dictionary `word_count`

    c. `i` is an even number

    d. the string `s` has at least 2 characters

4. Suppose that you have a list of numbers, `num_list`. You need to ensure that `num_list` has at least one even number in it. Write a function `has_evens(num_list)` that can be used in the assert statement below:

```
assert has_evens(num_list), "no evens in num_list"
```