

You are going to build an RNN by hand to perform sentiment analysis on simple descriptions of basketball players.

Construct a trained RNN in the style of `example1.py`. Supply all the weights, biases, activation functions, etc.

The abbreviated version of English you will encounter has just 13 words:

| word | encoding |
|-------------|-----------------|
| he | 10000000000000 |
| she | 01000000000000 |
| is | 00100000000000 |
| and | 00010000000000 |
| but | 00001000000000 |
| not | 00000100000000 |
| very | 00000010000000 |
| tall | 00000001000000 |
| fast | 00000000100000 |
| strong | 00000000010000 |
| short | 00000000001000 |
| slow | 00000000000010 |
| weak | 00000000000001 |

For example, one valid sentence is: “She is strong and fast but not very tall.”

Let’s agree on some general rules for how such sentences are interpreted.

1. Positive adjectives are worth 1 point.
2. Negative adjectives are worth -1 point.
3. “Very” implies adding ± 1 point to the adjective that follows.
4. “Not” implies ignoring the adjective that follows.

In the previous sentence, “strong” and “fast” each contribute one point. “Very tall” would contribute two except that “not” causes us to ignore it. So the example sentence scores two points.

In a file titled `hw14_solution.py`, define a dictionary called `spec`.

Run `hw14_evaluate.py`, making sure that your solution file is on the Python path. If you're unsure whether the result is satisfactory, ask the instructor or TA.

NOTE: For this assignment, we may evaluate your submission against additional examples that you will not see.