**Life Event Pseudocode Ideation**

Book Capstone - Alicia Idea One

Set UP

* Link ID of original dataset to new dataframe with just the description field

Create Synset and Lemma Lists

* Life Event Variable Allocation
  + le\_1 = “wedding”
  + le\_2 = “moving”
* Create synsets for each life event
  + syn\_le\_1 = synset of le\_1
* Create lemmas for each life event
  + lem\_le\_1 = lemma of life event 1

Preprocess Text (this should speed up runtime hopefully)

* Lowercase all
* Remove punctuation
* Remove numbers and non-alpha characters
* remove stopwords

Search Dataset for Synsets and Lemmas

* Tokenize description column
* Loop through tokens looking for synsets and put in one category
* Loop through tokens looking for lemmas and put in a different category
  + *Could rate books that have synsets more highly than ones with lemmas*
* Return 2 results

Giving Results

* Cross reference the results by ID with our original dataset and pull and return specified columns for those in the results from section above
  + Title, Author, ISBN, Pages

For Production:

* Would ask user for which life event then would either have a stored list already ready for that life event or would have algorithm search just that single life event.