Sentiment Analysis

- Detect polarity (e.g. a positive or negative opinion), or emotions (eg. happy, sad, angry) or even intent (query, complaint, suggestion) within a text
- The text could be a review (product, movie, book, restaurant), a whole document, a paragraph, a sentence, or even a clause.
- Applications: Customer service, Social Media / Reviews / Email monitoring, Market Research.
- Approaches: Lexicon based, ML based

Lexicon based

- A lexicon maps each word to a polarity (eg. positive/negative)
- Count the number of positive and negative words
- If number of positive is greater, conclude a positive sentiment.

```
sentiment
   word
   <chr>
                <chr>>
 1 abacus
               trust
 2 abandon
               fear
 3 abandon
               negative
 4 abandon
               sadness
 5 abandoned
               anger
 6 abandoned
               fear
   abandoned
               negative
 8 abandoned
               sadness
   abandonment anger
10 abandonment fear
# ... with 13,891 more rows
```