



# Translating Sentences into Symbolic Logic

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# Project Description

Design a script where, given a sentence, can identify prepositional phrases and breakdown its structure in order to output the symbolic logic of the statement

Once broken into Symbolic logic, a solution or verification of the statement(s) can be more clearly seen

Plan to use Python

- Large parsing libraries
- Script can be applied to a webpage and console

Stretch Goal: apply the output to solve the question presented



# User's point of view

A user will be able to type out a sentence into a text box and the symbolic structure will appear below

I will get an A if I have the time to study.

Propositions:

"I will get an A" (T),

"I have time to study" (U)

**$U \rightarrow T$**



# Why?

- I like words. I find words fascinating and worth studying.
  - ◆ always understood writing as a pseudo equation.
- Certain words tied together can draw out completely different meanings, even if the theme of the statements are the same.
- Due to this it is safe to assume that words have a defined value and adding certain values together can lead to a specific solution.
  - ◆ This becomes most applicable in arguments where one party applies their verbal value against another party's verbal strength.
  - ◆ This is why we have lawyers, we hire individuals who are experts with words to defend our property and rights.
- Judgement could potentially become more consistent with computational help



# Questions?

\* plz clap \*