

# Implication between 2 facts

## 1) Semilar Word to Word matching

<http://www.semanticsimilarity.org/>

In the semantic similarity approach, the meaning of a target text is inferred by assessing how similar it is to another text, called the benchmark text, whose meaning is known. If the two texts are similar enough, according to some measure of semantic similarity, the meaning of the target text is deemed similar to the meaning of the benchmark text. For instance, in dialogue-based Intelligent Tutoring Systems in which learners interact with a tutoring system through dialogue, students' natural language answers to, say, science problems are assessed by comparing them to ideal responses provided by experts. The students' answers are deemed correct if they are similar enough to experts' responses, which are deemed correct.

### Example results

tiger	cat	7.35
tiger	tiger	10.00
book	paper	7.46
computer	keyboard	7.62
computer	internet	7.58
plane	car	5.77
train	car	6.31
telephone	communication	7.50

## 2) Levenshtein distance

Measures number of edits required to match the string. In other words calculates how much distance is between the words (character wise)

## 3) Cortical.io similarity explorer

Compare the meaning of any two terms by overlaying their semantic fingerprints.

**Libraries/API for all are available**

# Evaluation Criteria for our Algorithm

- Precision/Recall
- Mean Average Precision OR Mean reciprocal rank
- Runtime