

Prolog NLP Lab Tasks December 2025

Study the NLP grammar provided in `parse2.pl`

Taking note of the fact that an auxiliary set of rules preserves the structure of sentences and maps onto a terminal vocabulary.

Produce a grammar in a file called **wire_nlp.pl** that will accept the following sentences

The(det) plug(noun) is(copula) connected(v) to(preposition) the(det) socket(noun)
The(det) socket(noun) is(copula) connected(v) to(preposition) wire(noun) one(number)
Wire(noun) one(one) is(copula) connected(v) to(preposition) the(det) outside(preposition) power(noun).

All (adj - plural) the (determiner - singular/plural) wires (noun - plural) are (copula - plural) good

Seeing how compact you can construct the grammar

Will your grammar accept the following sentences

Wire one is connected to wire two
The plug is fused

Using the Grammar developed previously and the morphing code in `morph.pl`. make a copy of the morphing code in a file called **wire_morph.pl** and write a morphing grammar that will show agreement in the sentences

Wire(noun) one(one) is(copula) connected(v) to(preposition) the(det) outside(preposition) power(noun).
All (adj - plural) the (determiner - singular/plural) wires (noun - plural) are (copula - plural) good

Will it accept

Wire one is connected to all the wires
And if not can you make it accept this valid sentence.