

Lab 6

You are fine to work together with others.

Use the concepts we have learned from Prolog to create your own definite-clause grammar (DCG) that generates a set of at least five different naturally grammatical sentences. For your reference, the ten possible grammatical English sentences are listed below. Keep your words simple, and have verbs that are already conjugated instead of trying to create rules to conjugate them (since this is a very complex process in almost every natural language).

(source: Understanding English Grammar, 6th ed., Martha Kolln and Robert Funk, pg 27–28)

(I would not try creating a grammar for all ten patterns, but use a few and play with them)

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|-----|----|--------|--------|------|
| 1. | NP | TO_BE | ADV/TP | |
| 2. | NP | TO_BE | ADJ | |
| 3. | NP | TO_BE | NP1 | |
| 4. | NP | LNK_V | ADJ | |
| 5. | NP | LNK_V | NP1 | |
| 6. | NP | INTR_V | | |
| 7. | NP | TR_V | NP2 | |
| 8. | NP | TR_V | NP3 | NP2 |
| 9. | NP | TR_V | NP2 | ADJ1 |
| 10. | NP | TR_V | NP2 | NP4 |

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| <ul style="list-style-type: none"> • NP subject noun phrase • NP1 subject complement • NP2 direct object • NP3 indirect object • NP4 object complement • TO_BE verb “to be” • ADV/TP adverbial of time or place | <ul style="list-style-type: none"> • ADJ adjective subject complement • ADJ1 adjective object complement • LNK_V linking verb
(seem, became, etc.) • INTR_V intransitive verb • TR_V transitive verb |
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This lab is out of 5 marks total. One mark for each grammatically correct sentence. Submit a `lab6.pl` file to Blackboard in the Assignments and Tests section under Lab 6 submission. Deadline for submission is end of class, Dec 7, before 2:20 pm.