Prolog Cheatsheet

This prolog cheatsheet is provided to give you a helpful reminder of useful Prolog predicates. What these predicates do is in general very easy to infer from their name. We consciously avoid giving further explanation of these predicates within the cheat sheet. To read more information about a specific predicate, use the `apropos/1` and `help/1` commands to access the built-in documentation for that predicate. e.g. `help(numlist).` You can also look them up using the search command of the online documentation at www.swi-prolog.org (also available locally during examination at a location specified on your exam sheet).

Remember that this cheatsheet is not meant to be a complete overview of any predicate that you will need. Many other useful predicates exist, and they can be found in the documentation. Make sure you acquaint yourself with the documentation, and how it works. Time spent taking a look through the common libraries is time well-spent. *(last update 18/11/2020)*

Loading and Reloading Files

- `make/0`
- `consult/1`
- `[file]`
- `['file.pl']`

Lists

- `member/2`
- `append/3`
- `select/3`
- `delete/3`
- `nth0/3`
- `nth1/3`
- `length/2`
- `reverse/2`
- `permutation/2`
- `flatten/2`
- `sum_list/2`, `max_list/2`, `min_list/2`
- `numlist/3`
- `is_set/2` and `list_to_set/2`
- `intersection/3`, `union/3`, `subset/2`
- `subtract/3`
- `sort/2` and `sort/4`

Unification, Comparisons and Arithmetic

- `=/2` and `\=/2`
- `\==` and `\==/2`
- `>/2`, `</2`, `=</2`, `>=/2`, `=\=/2`,
- `=:=/2` and `is/2`
- `+/2`, `-/2`, `//2`, `*/2`, `mod/2`, `rem/2`, `div/2`, `max/2`, `min/2`, `abs/1`

Control

- `\+/1`
- `fail/0`
- `!/0`
- `;/2`
- `->/2`

Applying and Meta

- `include/3`, `exclude/3` and `partition/4`
- `maplist/2`, `maplist/3`, etc...
- `findall/3`
- `=../2` and `call/1`

Debugging

- `trace/0` and `notrace/0`
- `debug/0` and `nodebug/0`

Built-in documentation

- `apropos/1`
- `help/0` and `help/1`