

Prolog's version of READ-EVAL-PRINT

SCHEME expects expressions to *evaluate*.

Prolog expects goal lists to *solve*.

WHILE [the goal list is non-empty]

Select the first goal in the list

Scan the rules for one whose head matches that goal (and hasn't been tried on it yet).

IF [such a rule is found]

THEN Replace the goal by the body of the matching rule. Variable bindings due to the matching are applied to the entire goal list.

ELSE Restore the goal list and bindings as they were prior to the most recent rule selection (i.e., backtrack).

(If there is no previous state to which we can backtrack, then the current goal list is the initial goal list and all solution attempts have led to failure, so **Fail**.)

END WHILE

Succeed