

function PL-FC-ENTAILS?(KB, q) **returns** *true* or *false*

inputs: KB , the knowledge base, a set of propositional definite clauses

q , the query, a proposition symbol

$count \leftarrow$ a table, where $count[c]$ is initially the number of symbols in clause c 's premise

$inferred \leftarrow$ a table, where $inferred[s]$ is initially *false* for all symbols

$queue \leftarrow$ a queue of symbols, initially symbols known to be true in KB

while $queue$ is not empty **do**

$p \leftarrow \text{POP}(queue)$

if $p = q$ **then return** *true*

if $inferred[p] = \text{false}$ **then**

$inferred[p] \leftarrow \text{true}$

for each clause c in KB where p is in c .PREMISE **do**

decrement $count[c]$

if $count[c] = 0$ **then** add c .CONCLUSION to $queue$

return *false*