EXPERIMENT 31

Prolog program for truth tables for logical expressions

|  |
| --- |
| and(A, B) :- A, B. |
|  |  |
|  | evaluate(E, true) :- E, !. |
|  | evaluate(\_, false). |
|  |  |
|  | bool(true). |
|  | bool(false). |
|  |  |
|  | tableBody(A,B,E) :- |
|  | bool(A), |
|  | bool(B), |
|  | write(A), |
|  | write(' \t '), |
|  | write(B), |
|  | write(' \t '), |
|  | evaluate(E, Result), |
|  | write(Result),nl, fail. |
|  |  |
|  |  |
|  | INPUT/OUTPUT: |
|  | ?- |
|  | | tableBody(A,B,and(A,B)). |
|  | true true true |
|  | true false false |
|  | false true false |
|  | false false false |
|  | false. |