EX.NO: 7 DATE:08.11.2024

Reg.no:220701054

PROLOG FAMILY TREE

AIM:

To develop a family tree program using PROLOG with all possible facts, rules, and queries.

SOURCE CODE:

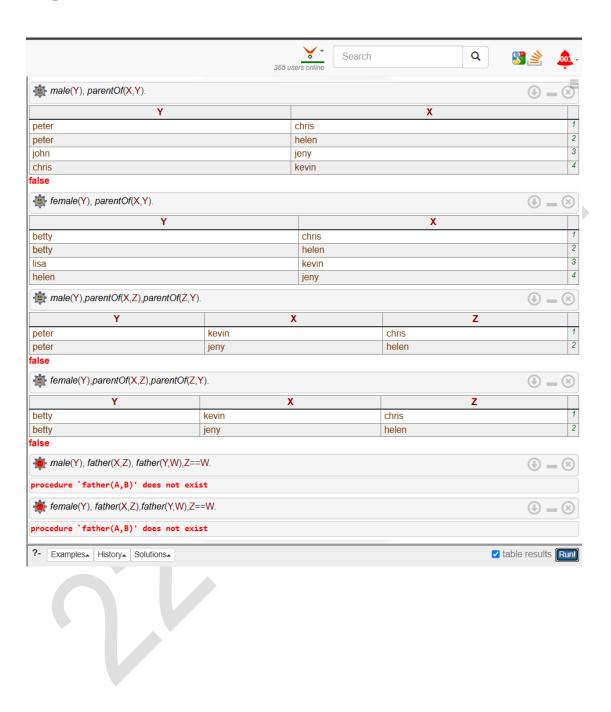
KNOWLEDGE BASE:

```
/*FACTS :: */
male(peter).
male(john).
male(chris).
male(kevin).
female(betty).
female(jeny).
female(lisa).
female(helen).
parentOf(chris,peter).
parentOf(chris,betty).
parentOf(helen,peter).
parentOf(helen,betty).
parentOf(kevin,chris).
parentOf(kevin,lisa).
parentOf(jeny,john).
parentOf(jeny,helen).
```

/*RULES :: */ /* son,parent son,grandparent*/

```
father(X,Y):-male(Y), parentOf(X,Y).
mother(X,Y):- female(Y), parentOf(X,Y).
grandfather(X,Y):-male(Y),parentOf(X,Z),parentOf(Z,Y).
grandmother(X,Y):- female(Y),parentOf(X,Z),parentOf(Z,Y).
brother(X,Y):- male(Y), father(X,Z), father(Y,W),Z==W.
sister(X,Y):-female(Y), father(X,Z),father(Y,W),Z==W.
```

Output:



Result:

Thus, we have developed a family tree program using PROLOG with all possible facts, rules, and queries.