Department of Computer Science and Engineering

Lab Work

Course Title – Artificial Intelligence and Expert Systems Lab

Course Code- CSE 404

Year- 4th Semester- 1st

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Problem Title: Implement a basic family relationship tree structure of your own family using Prolog

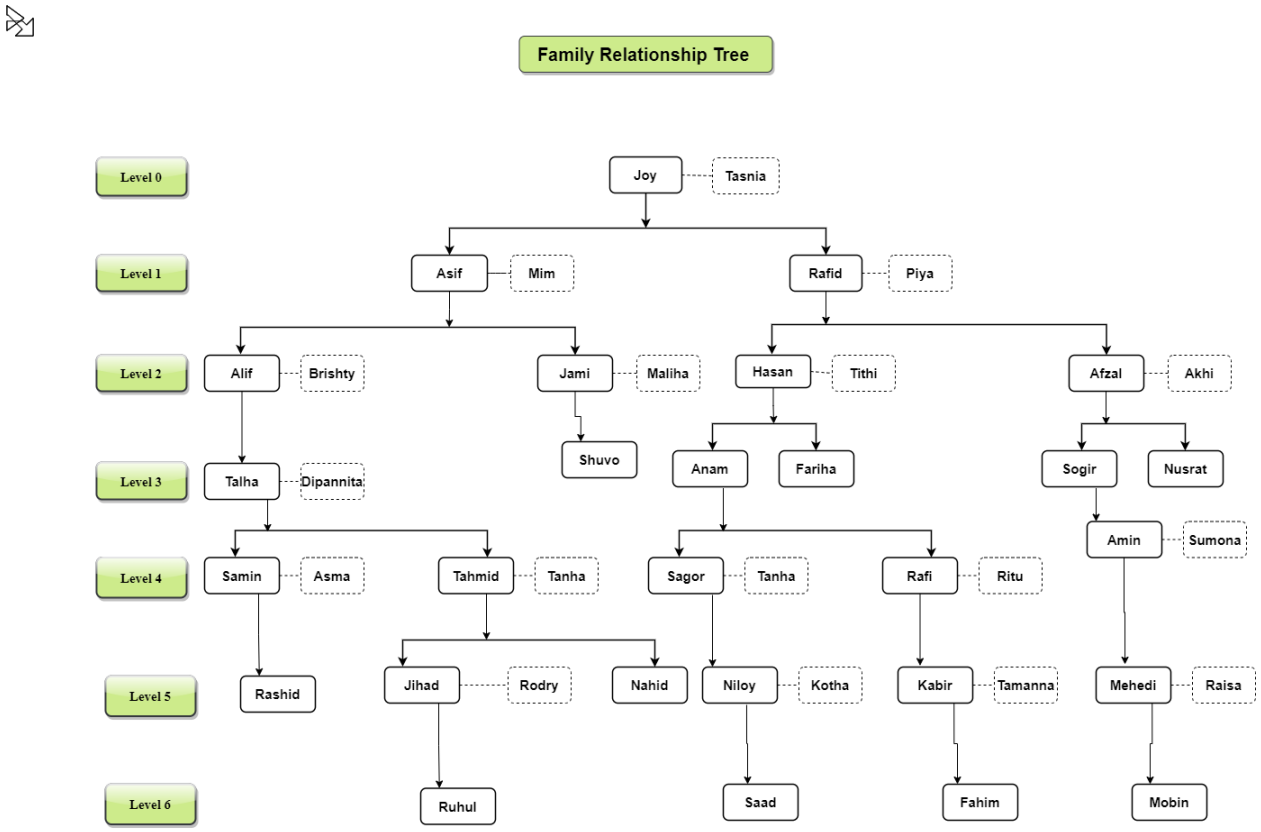
Problem Description:

Implement a basic family relationship tree structure of your own family using Prolog. Write rules against degree and removal for up to 3rd degree and twice removed situation for cousin relationship. You have to use recursion in your rules for different family relations.

Tools and Languages:

- App diagram dot net
- Notepad
- SWI-Prolog

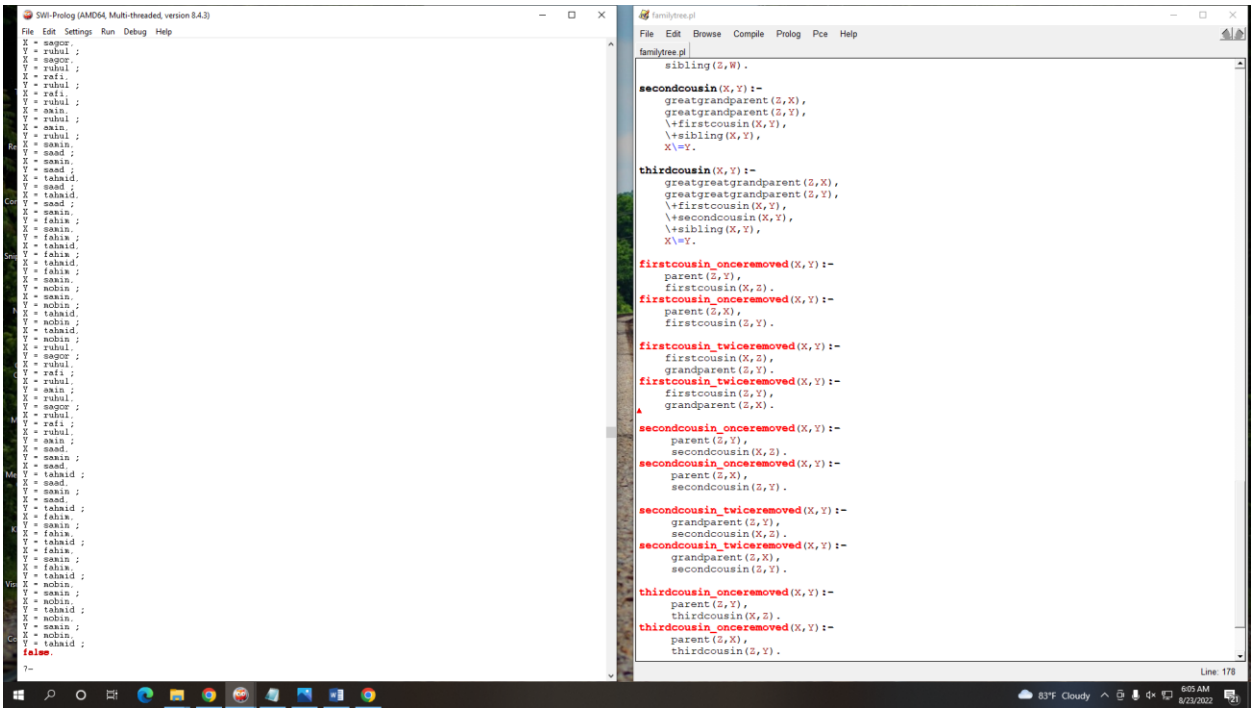
Diagram:



The above diagram is my family relationship tree structure. Now with help of SWI-Prolog, I'll remove the first, second, third cousin twice times. In the tree, all bold rectangular box represents a strong entity, and the dotted rectangular box represents a weak entity.

Sample Input/Output:

In the screenshot, here is the sample output for father, mother, parent, grandparent, great-grandparent, great great grand parent for a individual person.



And here is the sample output by removing first cousin, second cousin and third cousin first cousins, second cousin and third cousin.

Conclusion:

I had faced some minor problems during completing the assignment like code error, also could not find the desire output. I have also fix all the errors of SWI-prolog.