

## Prolog

I was intrigued to learn a completely new type of language which was even different from Ruby and Io. That is, Prolog was the first declarative language that I encountered in my life. I was able to write some facts and inferences in Prolog and it would do the reasoning for me where I didn't need to write any steps by steps procedures (algorithms). That is the reason, I was extremely fascinated with Prolog. Like Io, it was easy to learn Prolog as it has very simple syntaxes. I actually loved the way we'd solve the problem if we'd describe it well; which is one of the major goals of declarative language like Prolog. I honestly loved easy to use the method of recursion over iteration in Prolog which I believe is useful and efficient. Need to mention, the way we have tuples and lists in Prolog where lists are containers of variable length, and tuples are containers with fixed length was fascinating. That's why, unification through core data structures in Prolog is a significant tool, which I found especially interesting. While talking about the games in Prolog, I'd easily build the advanced games like Sudoku where I don't need to know all the tricks and techniques to play, which is amazing. While seeing the use of Prolog from airline scheduling to financial derivatives, I think I'd come back and use it especially in the field of puzzle games and artificial intelligence.

It was uncanny for me to see variables starting with uppercase letters or underscores. Although we don't need to write step by step details to build a program in Prolog, it has been disconcerting to me to view the program being presented in this way as at first it

was very difficult for me to understand the program. In addition to that, it was frustrating to get weird results sometimes since writing a program in Prolog is like writing the higher level of abstraction. Thus, I strongly believe that it has a lot of limitations and can't be efficiently used for general purposes so there is less likelihood for me to choose Prolog in long run or make it my one of the go-to language.