Note: This is merely a suggestive sample document with respect to the "Survey of Programming Languages" assignment. Your actual document must not feature Prolog among your six languages, and you should write your own abstract.

Assignment: Programming Languages I Might Like To Learn

Abstract

This assignment presents a short text for each of 6 programming languages that I might like to learn for one reason or another. Collectively, the short texts are intended to highlight some of the more salient features of programming languages.

Language 1: Prolog

The **Prolog** language was developed and implemented in Marseille, France, in 1972 by Alain Colmerauer with Philippe Roussel, based on Robert Kowalski's procedural interpretation of Horn clauses at University of Edinburgh. Kowalski's interpretation of Horn clauses was, in turn based on Alan Robinson's Resolution Principle (JACM 1965). Prolog was directly influenced by Carl Hewitt's **Planner** (MIT). Prolog influenced **Clojure**, **Erlang**, and many other languages. ((Wikipedia))

Prolog would be worth learning for any number of reasons, including the following:

- 1. Programming in logic has long been a dream of computer scientists since the inception of the field more than 7 decades ago, and computing in logic has been a dream of mathematicians and philosophers for hundreds of years. Since Prolog is by far the most significant logic programming language, it would be good to learn about its design and implementation.
- 2. Prolog has a powerful pattern matching mechanism that has influenced a range of languages, including Erlang, Haskell, and Rust. Thus, it would be good to experience Prolog's pattern matching mechanism first hand.
- 3. The motivating application for Prolog was natural language processing, and Prolog has been used in many natural language processing projects. Since I am interested in natural language processing, I would like to learn about Prolog's "definite clause grammar", and experience how the language might be used to do NLP work.

Language 2: <<Name of Language>>

<<Short Text 2>>

Language 3: <<Name of Language>>

<<Short Text 3>>

Language 4: <<Name of Language>> <<Short Text 4>> Language 5: <<Name of Language>> <<Short Text 5>> Language 6: <<Name of Language>>

<<Short Text 6>>