

Prolog Project

401-Programming Languages

1 Prolog Installation

- Linux/Unix, OS X, Windows: Go to <http://www.swi-prolog.org/download/stable>, and select the relevant version under “Binaries”.
- On Debian based systems: start up terminal and type the command
`sudo apt-get install gprolog`
or `sudo apt-get install swi-prolog`
- CIS: gprolog and swi-prolog are also installed on the vulcans.

2 Assignment

- 1 Write a program that understands simple English sentences having the following forms:

_ is a _ .
A _ is a _ .
Is _ a _ ?

The program should give an appropriate response (yes, no, ok, unknown), on the basis of the sentences previously given. For example,

John is a man.
ok
A man is a person.
ok
Is John a person?
yes
Is Mary a person?
unknown

- 2 Write a program to act as a simulated psychiatrist that makes a reply based on key words in the input. A typical dialogue might look something like this (computer responses are in *italic*):

What is your problem?
This is too much work.
What else do you regard as too much work?
Writing letters.
I see. Please continue.
Also washing my mother's car.
Tell me more about your family.
Why should I?
Why should you what?

.
.
.

In this example, the appropriate key words were 'this is', 'mother', and 'why'. Extend your program to include more keywords, (e.g., other members of your family, other interrogatives, etc.). Lack of an appropriate keyword should evoke the response (or something similar), "I see. Please continue".

- *Assignment report:* Turn in the source code of your project together with an assignment report. The assignment report should contain: (1) names of two team members including a short statement of work, (2) a description of your design, (3) what was difficult, (4) what did you like about Prolog, (5) what did you dislike about Prolog.