



cs310:
Programming Languages
 LCSEE, WVU, Spring 2012
 Lecturer: [Tim Menzies](#)

Links

- [Class web site](#)
- [Mail class list](#)
- [Archive of class list](#)
- [University web page](#)
- [Exam timetable](#)

Fun

- [Languages & religion](#)
- [Language authors](#)
- [Best language, ever](#)
- [A LISP interpreter](#)
- [Don't click here](#)

[<](#) [>](#) [<<](#) [Up](#) [>>](#) [Top](#) [Contents](#) [Index](#) [?](#)

3.5 Project3: Roll Your Own Prolog

Preliminaries

Goals

The goal of this project is to understand the unification process at the core of logic programming.

What to Hand In

The print out generated from

```
../submit cs310 3[ab] yourName
```

Marking

The project is due April 2.

The project is in three parts, 3a, 3b, 3c worth 3, 4, 5 marks each.

- To gain one bonus mark, hand in 3a by Monday, Mar19
- To gain another bonus mark, hand in 3b by Friday, Mar23

Setup

```
mkdir someDir4project3
cd someDir4project3
wget http://unbox.org/stuff/var/timm/12/310/src/Makefile --user guest --password
make update
cd 310.3
ls
```

If that works, you should see

```
├─ 15.lisp
└─ main.lisp
```

Project 3a

Write a file answers3a.txt with answers to the following questions.

1. What does this return: (match 'x 1 nil)?
2. Why does the match function return two values?
3. Give an example of the kind of structure that would satisfy var?.
4. Give an example of the kind of structure that would *not* satisfy var?.
5. Why does *binding* call itself recursively *before* it looks at the cdr of the current binding?
6. The function data1 includes a predicate sameSex that matches to two persons. Except for gender, every other field has a suffix that is either "1" or "2". Does gender need a suffix? Why or why not?

A revised form of 15.lisp with: