CSE341 – Programming Languages (Fall 2015)

Homework #1

Handed out: 11:00am Tuesday October 5, 2015.

Due: 11:55pm Tuesday October 16, 2015.

Hand-in Policy: PDF versions should be submitted online on Moodle by the submission deadline. No late submissions will be accepted.
Collaboration Policy: No collaboration is permitted. Any cheating (copying someone elses work in any form) will result in a grade of -100 for the first offense and -200 for the subsequent attempts.
Grading: Each homework will be graded on the scale 100. Unless otherwise noted, the questions/parts will be weighed equal.
Notes:

- Your function should be pure function (no setq)
- You should prefer recursion rather than iteration.
- You should provide comments.

You will implement a function, which returns an intersection list of two lists in **Common Lisp**. Function's name and parameters are fixed and will be tested automatically. The intersect function should be pure functional, so that any non-pure functions (such as let, set.. etc) is prohibited. Any submission violating this will be penalized by **-40**.

Function Prototype

```
(intersect list1 list2)
```

Sample Inputs and Outputs

```
(intersect '(a b c) '(a d c e))
```

```
=> (a c)
```

```
(intersect '(a b '(c f)) '(a d '(c f) e))
```

```
=> (a (c f))
```

```
(intersect '(a b c) '( b a c))
```

```
=> (a b c)
```