CSCE 531 Spring 2007

Quiz 14

Assigned Wednesday, 07-04-25

Consider the following Lisp function:

```
(label member (lambda (x lat)
  (cond
    ((null. lat) '())
    ((eq x (car lat)) 't)
    ('t (member x (cdr lat))))))
```

1. What is `(member 'foo '())`? **Answer:** `()`
2. What is `(member 'foo '(foo bar))`? **Answer:** `t`
3. What is `(member 'foo '(bar foo goo))`? **Answer:** `t`
4. In your words, what does `member` do? (Hint: "lat" stands for "list of atoms.") **Answer:** It returns `t` it its first argument (an atom) is a member of its second argument (a list of atoms). It returns `()` otherwise. Therefore, it implements a test for membership in a list of atoms.