CSCE 330 Spring 2006

QUIZ 19

Assigned Thurssday, 06-04-04

A recursive function has two parts, the *basis* and the *inductive step*.

1. The basis computes the result for sufficiently small arguments, without making any recursive call.
2. The inductive step calls the function recursively, with smaller arguments.

The following recursive function (which is intended to reverse a list and which is almost identical to the correct version we discussed in class) breaks one of these two rules. Which one? In which way?

```
fun reverse(L) =
  if L = nil then nil
  else reverse(L) @ [hd(L)];
```