

That Rushing Sound You Hear in the Walls of CB2

COP 4020 Tue/Thur 4:30pm

Assignment 1

## Answers to Problem 2

- a. Number 5, 3 : ( 5 : ( 3 : [ ] ) ) is equivalent to [3,5,3]
- b.
  - 1. ohno:'y' is illegal as a single char can only be prepended to the front of a list
  - 2. ohno ++ yikes is legal
  - 3. ohno:yikes is illegal as strings(lists) can not be prepended to strings(lists)
  - 4. ['o']:yikes is illegal as lists can not be prepended to strings(lists)
  - 5. 'o':yikes is legal
  - 6. 1:yikes is not legal as there is a type mismatch between the integer and list
- c. The result is ([3,4,7,5,8], [3,4,7,5,8])

## Answers to Problem 6

There is no easy, direct way to use list comprehension to solve this problem as list comprehension acts on each element of a list individually, without memory or regard to what happens to the previous or next element based on predicates of the list comprehension.