

# CS302: Paradigms of Programming

## Lab 5: Logic Paradigm

May 4<sup>th</sup>, 2021

---

**Q1.** Write a predicate `myLength(L,N)` capturing the condition that the list `L` contains `N` elements.

**Q2.** Write a predicate `myLast(X,L)` that captures the condition that `X` is the last element of the list `L`.

**Q3.** Explain to the TA if the following sets of Prolog terms are unifiable; if yes, also determine the resulting bindings.

- (i) `Bread = butter`
- (ii) `bread = butter`
- (iii) `food(bread,X) = food(Y,butter)`
- (iv) `food(bread,X,butter) = food(Y,cheese,X)`

**Q4.** Pick up the hostel puzzle from yesterday's class (question and solution both available in slides). Modify the puzzle to create at least one more that gives multiple different answers. Explain your changes to the TA.