CS 3210 - Principles of Programming Languages (Spring 2020)

## **Activity 13**

## Haskell Practice on Lists Functions

## References:

++	List concatenation operator
:	Append-head operator ("cons")
!!	Indexing operator
	Range-specifier for lists
\\	List-difference operator
<-	List comprehension generator
	Single assignment operator in do-constr.

Data.List Prelude package: http://hackage.haskell.org/package/base-4.12.0.0/docs/Data-List.html

Implement the following functions in Haskell.

- a) write function myLast that takes a list and returns its last element
- b) write function secondTwoLast that takes a list and returns its second to last element.
- c) write function elementAt that takes a list and an index k and returns the K'th element of the list. Consider that the first element in the list is at index number 1.
- d) write function myLength that takes a list and returns its number of elements.
- e) write function myReverse that takes a list and returns its reverse.
- f) write function middle that takes a list and returns the list stripped of its first and last elements, or empty if the given list has less than 3 elements
- g) write function is Palindrome that takes a list and returns true/false whether the list is a palindrome or not. A palindrome can be read forward or backward; e.g. (x a m a x).