COMP 333
Fall 2021

Algebraic Datatypes and Pattern Matching in Swift

1.) Define an `enum` named `MyBool` which represents truth and falsehood.

2.) Define an `enum` named `MyList` which encodes a singly-linked list of integers, using the same cons/nil structure that we used in assignment 1.

3.) Using the prior enum definition, create a list containing 1, 2, and 3, in that order.

4.) Write a `switch` which will pattern match on a variable named `list`, and do one of the following:

- If the list starts with a 2, return 0
- If the list starts with a 3, followed by a 4, return 1
- For any other non-empty list, return the value of the first element
- If the list is empty, return -1

5.) Write a function named `length` which takes a list as a parameter, and recursively computes the length of the given list.