# CSCI 239—Discrete Structures of Computer Science Lab 8—Haskell Functions 2

In this lab, you will write and test Haskell functions that implement recurrence relations; in the next lab you’ll use these Haskell functions and other tools to solve these recurrence relations.

## Objectives:

* to gain experience writing recursive Haskell functions
* to use Haskell functions as an aid to solving recurrence relations.

Create a *Lab08* folder in your *CS239* folder and put all code you write in this lab into this folder.

For each of the following recurrence relations, write a Haskell function implementing the recurrence relation. Then use the *map* function to compute the first ten values for the function. Record these values in a comment after the code for each function. Your function does not need to handle values the recurrence relation is not defined for.

For example, if your function is *relA* and the base value is zero, you can use:

>> map relA [0 .. 9]

to compute relA n for the values zero to nine.

Here are the recurrence relations to code in Haskell:

(Use integer division; compute the values of *L* for *n* up to 32.)

As you complete these Haskell functions, show them to your TA or lab instructor.