Assignment 11

Ripple Adder

Introduction

Use LogicCircuit to create a 32-bit ripple adder.

The Circuit

Implement the adder recursively, starting with a half adder and a full adder. Create the following circuits:

- Half Adder (HA)
- Full Adder (FA)
- 2-bit Adder (Add 2-bit)
- 4-bit Adder (Add 4-bit)
- 8-bit Adder (Add 8-bit)
- 16-bit Adder (Add 16-bit)
- 32-bit Adder (Add 32-bit)

The inputs 32-bit inputs `a` and `b` should be at the top, the carry-in bit `c-in` should be on the right, the carry-out bit `c-out` should be on the left, and the 32-bit output sum `s` should be at the bottom.

Due Date

Save your circuits in one file named `Adder.CircuitProject`. Place it in a folder named `Assignment 11` and drop it in the dropbox. It is due by midnight Friday, October 25.