Subject: Task 4
Posted by jmbeach1 on Wed, 13 Apr 2016 15:13:21 GMT
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Why do we pass "cout" to add4? I thought we would pass in a carry-in wire. Are we using some call-by-reference voodoo to set the c-out wire's value from inside add4?

Subject: Re: Task 4
Posted by jarobinson3 on Wed, 13 Apr 2016 16:27:42 GMT
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If you connect a gae to another gate you need the wire that connects them. The cout wire from the first gate is also one of the input wires to the second gate. Remember you can call get-signal and set-signal on a wire, so any changes to a wire in the first gate will be propagated to the second gate.

Subject: Re: Task 4
Posted by jmbeach1 on Wed, 13 Apr 2016 23:01:08 GMT
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That makes sense, but I guess let me rephrase and say why don't we *also* need a c-in?

Subject: Re: Task 4
Posted by jmbeach1 on Thu, 14 Apr 2016 02:22:12 GMT
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I think I set up my add 4 right, but I'm not really sure how to validate the output

Subject: Re: Task 4
Posted by lusth on Thu, 14 Apr 2016 12:38:44 GMT
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Run all possible inputs, check the outputs. There are 32 possible inputs.

Subject: Re: Task 4
Posted by tscrompton on Fri, 15 Apr 2016 07:26:30 GMT
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jmbeach1 wrote on Wed, 13 April 2016 18:01 That makes sense, but I guess let me rephrase and say why don't we *also* need a c-in?
In the unlikely event, that you're still wondering about this, a ripple carry adder doesn't require a cin. If you don't supply a cin, the adder for the least significant bit(s) assumes a value of 0 for cin. Since the directions say to use full adders, just ground cin (set it to 0) on the full adder for the LSB.