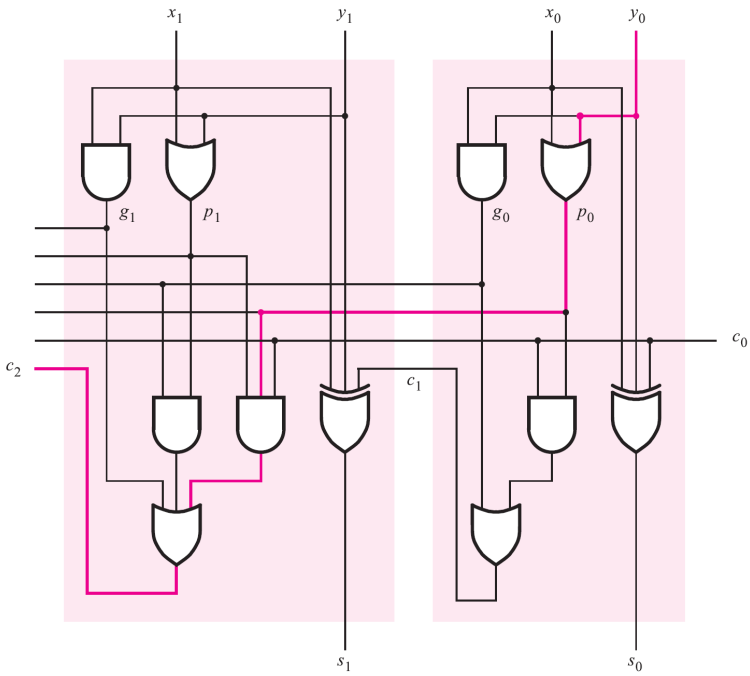
Started on	Tuesday, 14 September 2021, 10:05 AM
State	Finished
Completed on	Tuesday, 14 September 2021, 10:10 AM
Time taken	4 mins 22 secs
Marks	1.00/1.00
Grade	**10.00** out of 10.00 (**100**%)

Question 1

Correct

Mark 1.00 out of 1.00

The following figure represents the first two stages of a carry-lookahead adder. The inputs to the adder are X (x_1x_0) and Y (y_1y_0). The notations c_1 and c_2 denote the carry-out from the two stages. Let us assume that an AND or an OR gate takes one unit of time to complete its operation. At time T = 0 unit, the inputs are set as X = 01 and Y = 10. At time T = 5 units, a new set of inputs are set as X = 11 and Y = 01. In this above scenario, which of the following represents the correct set of values of c_2 at (T = 5 units, T = 6 units, T = 7 units, and T = 8 units).



Select one:

- 0, 1, 1, 1
- 0, 0, 1, 1
- 0, 0, 0, 1 ✓
- None of the given options
- 1, 0, 0, 1

Your answer is correct.

The correct answer is: 0, 0, 0, 1