Tushar Shrivastav

COEN 21 HW#4

1/28/2022

1. Why do we need/use a Carry Look Ahead Adder?
    We use a Carry Look Ahead Adder to "predict the carry" for the sum.
2. What are some advantages of a Carry Look Ahead Adder?
    The advantages of Carry Look Ahead adder are the speed of the circuit (speed of receiving signal and sending/ propagation delay).
3. What are some of the disadvantages of a Carry Look Ahead Adder?
    Some disadvantages of a Carry Look Ahead Adder are mainly the cost vs complexity of the circuit. The higher the complexity the higher the cost. (This happens very fast).
4. List some differences between a Ripple Adder vs CLA Adder
    The difference between Ripple Adder vs CLA Adder is that in the Ripple Adder the signal is pushed through all gates to find a sum, while the CLA Adder does not need gates in order to find sums.