Assignment 2

Due on 2019-09-21, 23:59 IST.

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

1. List the following hardware resource element type will be needed for implementing a serial FIFO that uses resource sharing:

   - Divider
   - ROM
   - Registers
   - Decoder
   - Multiplexer
   - Vender
   - Transmission gate

   For the above diagram, consider the propagation delay (static) of the nodes are \( \Delta t_a = 30, \Delta t_b = 10 \), and \( \Delta t_c = 40 \), ignore unit:

   ![Diagram of a serial FIFO with nodes and delays]

   Based on the above graph answer the following questions 2 to 6.

2. Each of the following thing schedules, indicates whether they are valid or invalid:

   - A: (A, B, C, D, E)
     - Invalid

   - B: (B, C, D, E, A)
     - Invalid

3. No, the answer is incorrect.

   - Feedback:
     - Solution: This is a valid sequence of thing for the serial FIFO graph.

4. C: (C, B, A, D, E)
   - Valid

5. No, the answer is incorrect.

   - Feedback:
     - Solution: \( C_2 \) and \( C_3 \) are the two initial states, but \( C_1 \) cannot start until \( E \) has finished at least once to give a token on the 2-0 edge, or in other words, it does not have sufficient input states to do事情 two things to start.

6. No, the answer is incorrect.

   - Feedback:
     - Solution: \( C_2 \) or \( C_3 \) can be considered initial states, but \( C_1 \) cannot start until \( E \) has finished at least once to give a token on the 2-0 edge, or in other words, it does not have sufficient input states to do事情 two things to start.

7. For the thing sequence \( A, B, C, D, E \):
   - How much is relatively:
     - 3 point

8. No, the answer is incorrect.

   - Feedback:
     - Solution: "No, the answer is incorrect." (Type Name: "No")

9. No, the answer is incorrect.

   - Feedback:
     - Solution: "No, the answer is incorrect." (Type Name: "No")

For the mark-rate directed graph shown in the figure, based on this answer the following questions 7 to 9:

10. What should be the value of \( a \) so that the directed graph can execute in a valid manner?
    - No, the answer is incorrect.
    - Accepted Answers:
      - (Type Name: "No")

11. What should be the minimum value of \( b \) for valid thing of the graph?
    - No, the answer is incorrect.
    - Accepted Answers:
      - (Type Name: "No")

12. \( A = 4 \), \( x = 2 \), draw the result in the graph will eventually:
    - Endframe