Homework 6

1) A sequential circuit with two flip-flops A and B, one input X, and one output Z is specified by the following equations:

$A(t+1) = X'A(t) + XB(t)$

$B(t+1) = X'A(t)'$

$Z \qquad = XA(t) + XB(t)'$

Transform and implement the sequential circuit **as Moore finite state machine (FSM)**:

    (a) Draw the logic diagram of the Moore FSM;
    (b) Derive the state table of the Moore FSM;
    (c) Derive the state diagram of the Moore FSM;