Exercise 1  Model check the modal formula for Mutual Exclusion over (the model of) the system with one $t_1 t_2$ state.

Exercise 2  Formulate in modal logic the property that if $t_1$ holds in a state, a state is reachable in zero, one or two steps where $c_1$ or $c_2$ holds.
   Check the property for the system with one $t_1 t_2$ state and for the system with two $t_1 t_2$ states.

Exercise 3  Check the Eventual Access property in CTL for the system with one $t_1 t_2$ state.

Exercise 4  Check the Non-blocking property in CTL for the two systems.