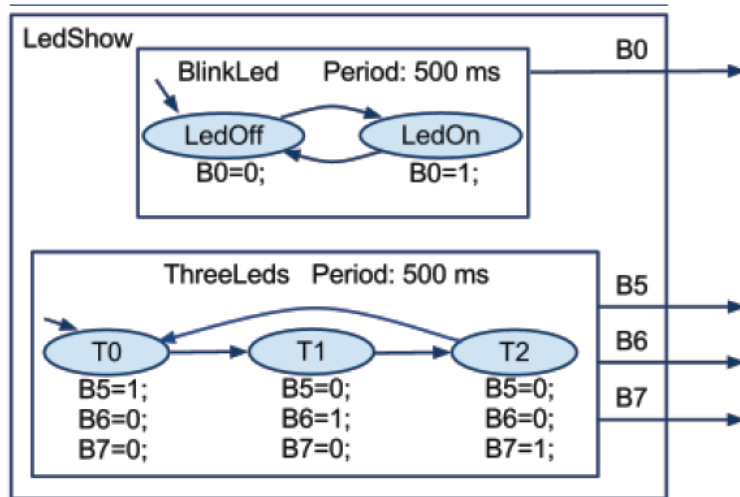


## Homework #8 Z5

### Outline Chapter Z8

Consider the state machine [Figure 5.1.1: LedShow](#).



When the C-language code is generated, -1 is used to create the initialization state for each of the Tick functions. The challenge is if this code is used with C++ compiler, there is a mix between integer and the enum data types.

1. Take the generated C code, edit it, and replace the -1 state generated by RIBS with an enum data type (SM\_Init) states so it will compile properly.
2. Replace the integer notation with enum data types for the call and return arguments for Tick functions where they should be.
2. From the listing code, please give the block of line numbers for code which are concerned with the following:
  - A) Main function initialization of values
  - B) Main function idle loop
  - C) Main function schedule loop has already been moved to the ISR, but give those numbers too.

The reason for these actions is using this state machine model in a real C++ GUI system, the application itself cannot take control of the CPU and must be partitioned into these functional sections. As a result, the Main function idle loop will be replaced by relinquishing control to the GUI system.

Be sure to turn in both the SM diagram and the generated C code.