

This is Participation Exercise 3.

Implement this variation of the LEDShowMultiPeriod sample that is used in class and also in Chapters 8 and 10 of the Programming Embedded Systems text book.

The variation is similar to the text versions with each Tick function having different execution periods, Blinky: 100 msec, ThreeLED's: 400 msec.

See the Illustration 1Blinky Finite State Machine Diagram. Note that B0 LED will be on for 800 msec and off for 300 msec.

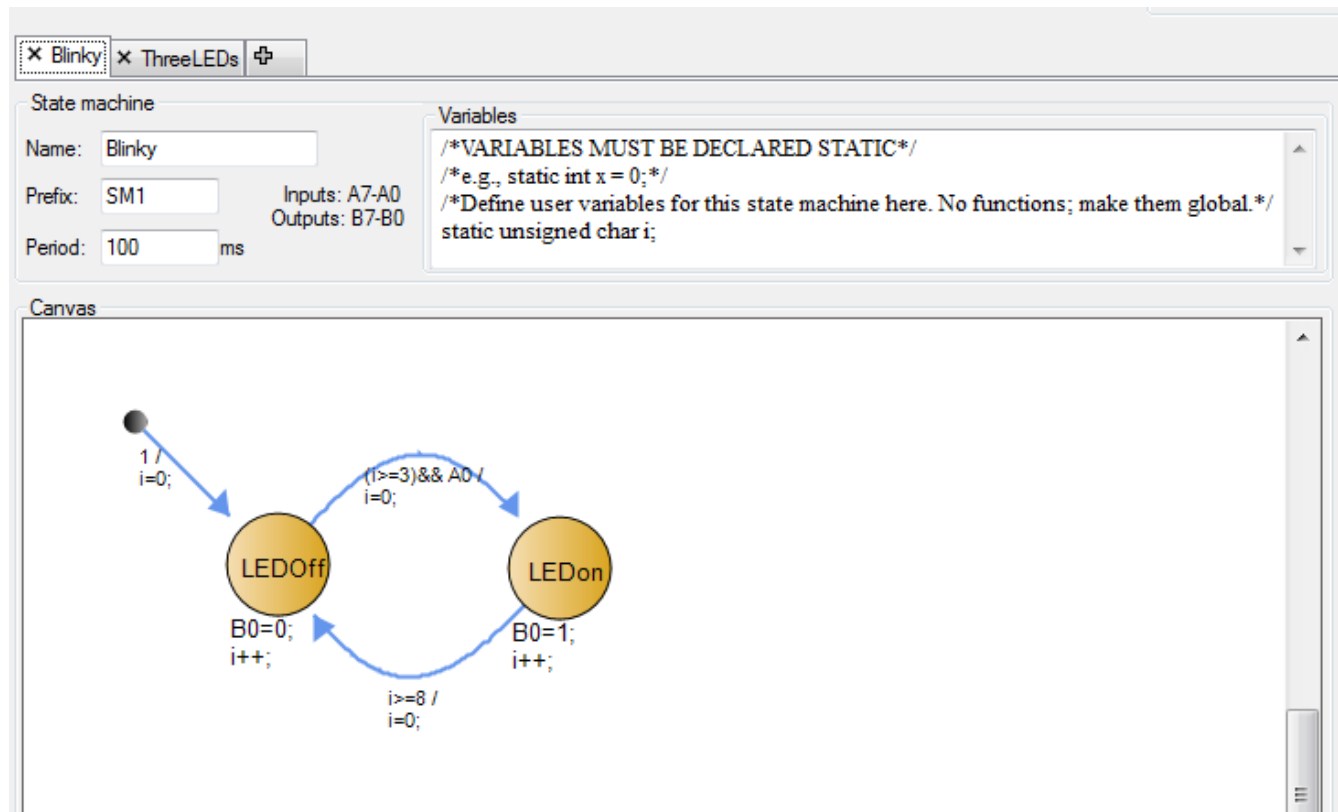


Illustration 1: Blinky

In Illustration 2 Three LED's is the Finite State Machine for the second Tick Function.

Note that bitwise operators are used to blink the upper 3 LED's.

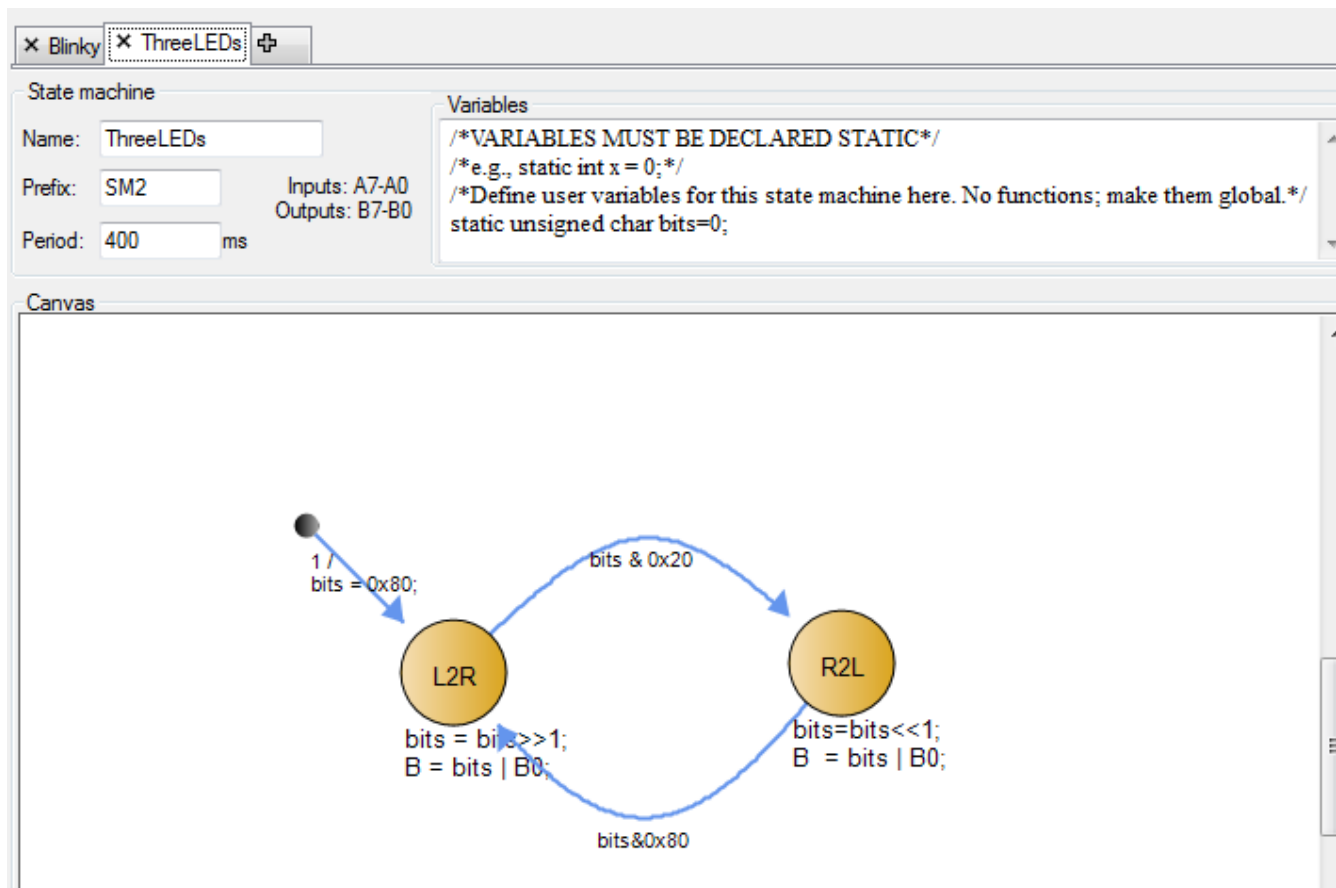


Illustration 2: Three LED's

Your group task is for each person in the group to submit their own of the following:

1: to create the RIBS diagrams like shown in the illustrations and run the simulation with the RIMS simulator.

2: Then take the resulting C language code and place it into the Energia IDE with the skeleton code from the following web page:

https://sites.google.com/site/drwatsonresources/msp430-learning-blocks/sketch_classdirectisr

Make the 9 conversions to the RIMS code which are listed at the end of the C code included on that page.

Make two photos: 1, a photo of the RIMS simulator running, and 2, a photo of the code running in the SPI add-on board for the LaunchPad.

Turn in both photos in a single document on the Assignment submission web site.