# Project 1

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## Purpose

The purpose of this project was to implement the state machine below on the Tiva C Launchpad using C.

## Questions

*How you prevented transition from one state to another due to pressing an unexpected button. For example, how did you make sure that pressing SW2 while in state Red does not result in transition to Blue state.*

I prevented transitions by modifying the Delay() function to Delay\_Seconds(int), which takes a number of seconds as an argument. When in a certain state, execution is stuck in the Delay\_Seconds function until the delay is complete.

*What happens if you press SW1 while in Red state? Would you wait for another 1 second or will you ignore SW1? Discuss the behavior of your program.*

When it’s in the Red state, it’ll ignore SW1 until it’s brought back to the Dark state. If it’s still pressed while in the Dark state, it’ll go back into the Red state.

*Similarly, what happens if you press SW2 while in Blue state? Would you wait for another 2 seconds before going to Dark state or will you ignore SW2?*

It’ll ignore SW2 until it’s brought back to the Dark state.