Problem Set 7   Date: June 13, 2023

Timers

In this lab, you will be learning how to use Timers and Interrupts in Embedded C.

To learn about timers, refer to the following document: 8051 Timers

To learn about interrupts, refer to the following document: 8051 Interrupts

1. Write a program in Embedded C to create asymmetrical square wave at port P1.6 using timer 1 in polling mode. The square wave should have 4 ms ON time and 12 ms OFF time.

2. Write a program in Embedded C to generate two square waves simultaneously at P1.6 and P1.7 pins of time period 2 ms and 3 ms using timer 0 and timer 1 respectively in interrupt mode.