

## Lab 4

### Problem Statements:

#### 1. Modulo Ten Up Counter

Write a program to count from 0 to 9 with a one-second delay between each count. Assume the clock frequency 3.125 MHz.

#### 2. Traffic Signal Controller

Write a program to provide the given on/off time to three traffic lights (green, yellow, and red) and two pedestrian signs (walk and don't walk). The traffic and pedestrian flow is in the same direction; the pedestrian should cross the road when the green light is on.

Light	Data Bit	On time
Green	D0	15 seconds
Yellow	D2	5 seconds
Red	D4	20 seconds
Walk	D6	15 seconds
Don't walk	D7	25 seconds