```
 1: #include "Set_TF2.c"
 2:
 3: void default_Seq(){
 4:      //REMEMBER TO REPLACE THE DELAYS WITH vdelay_ms() COMMAND!!!
 5:
 6:      PORTB = 0b00010010;          //All Amber
 7:      delay_ms(500);
 8:      PORTB = 0b00001001;          //All Red
 9:      delay_ms(2000);
10:
11:    while(1){
12:        Set_Traffic();            //check for traffic count
13:        delay_ms(500);
14:        PORTB = 0b00100001;       //NS Red, EW Green
15:        Vdelay_ms(delayLen_msA);
16:        PORTA = delayLenA;            //show delay length on 7 seg display
17:        PORTB = 0b00010001;       //NS Red, EW Amber
18:        delay_ms(500);
19:        PORTB = 0b00001001;       //NS Red, EW Red
20:        delay_ms(500);
21:        PORTB = 0b00001100;        //NS Green, EW Red
22:        Vdelay_ms(delayLen_msB);
23:        PORTA = delayLenB;
24:        PORTB = 0b00001010;       //NS Amber, EW Red
25:        delay_ms(500);
26:        PORTB = 0b00001001;        //NS Red, EW Red
27:        }
28: }
29:
30: void main() {
31:
32: //set the Counters
33: T0SE_bit = 0;     //increment at rising edge of T0CK
34: TMR1ON_bit = 1;
35: T1OSCEN_bit = 1;
36: TMR1CS_bit = 1;
37: T0CS_bit = 1;
38:
39: //initialise ports
40: PORTA = 0x00;
41: PORTB = 0x00;
42: TRISA = 0xF0;
43: TRISB = 0x00;
44: TMR0 = 0;
45: TMR1L= 0;
46:
47: //run the main sequence please!
48: default_Seq();
49:
50:
51:
52: }
```