

```
1: unsigned short counterA, counterB, delayLenA, delayLenB;
2: unsigned short delayLen2A, delayLen2B, countOffset;
3: unsigned long delayLen_msA, delayLen_msB; //long var increases max time to
4:                                           //4,000,000 seconds!
5:
6: unsigned short Set_Traffic() {
7:     counterB = TMR0;           //take counterB's value from Timer0
8:     counterA = TMR1L;          //also take counterA's value form Timer1
9:     delayLenA = 10;            //10s is the default value of our delays
10:    delayLenB = 10;
11:
12:
13:    if(counterA>5){              //when counter has counted more than 5 cars...
14:        //..in less than 10 seconds...
15:        countOffset = counterA - 5;
16:        delayLen2A = 2*countOffset; //add 2 seconds for each
17:                                   //additional car after 5s
18:        delayLenA += delayLen2A;
19:    }
20:
21:    if (counterB>5){              //this is identical to the code above,
22:        //but its meant for counterB
23:        countOffset = counterB - 5;
24:        delayLen2B = 2*countOffset;
25:        delayLenB += delayLen2B;
26:    }
27:    delayLen_msA = delayLenA*1000; //change values into milliseconds
28:    delayLen_msB = delayLenB*1000;
29:
30:    TMR0 = 0;                     //reset your counters immediately
31:    TMR1L = 0;
32:    return delayLen_msA, delayLen_msB;
33: }
```