

```
1: unsigned short counterA, counterB, delayLenA, delayLenB;
2: unsigned short delayLen2A, delayLen2B, countOffset;
3: unsigned int delayLen_msA, delayLen_msB;
4:
5: unsigned short Set_Traffic() {
6:     counterB = TMR0;           //take counterB's value from Timer0
7:     counterA = TMR1L;          //also take counterA's value form Timer1
8:     delayLenA = 3;             //3000ms is the default value of our delays
9:     delayLenB = 3;
10:
11:
12:     if(counterA>15){           //when counter has counted more than 15 cars...
13:         //..in less than 3 seconds...
14:         countOffset = counterA - 15;
15:         delayLen2A = 2*countOffset; //add 2 seconds for each
16:                                     //additional car after 15
17:         delayLenA += delayLen2A;
18:     }
19:
20:     if (counterB>15){           //this is identical to the code above,
21:         //but its meant for counterB
22:         countOffset = counterB - 15;
23:         delayLen2B = 2*countOffset;
24:         delayLenB += delayLen2B;
25:     }
26:     delayLen_msA = delayLenA*1000; //change values into milliseconds
27:     delayLen_msB = delayLenB*1000;
28:
29:     TMR0 = 0;                   //reset your counters immediately
30:     TMR1L = 0;
31:     return delayLen_msA, delayLen_msB;
32: }
```