

```

#include "RIMS.h"

volatile unsigned char TimerFlag = 0;

void TimerISR() { TimerFlag = 1; }

enum GP_States { GP_Start, GP_Pulse } GP_State;

void GP_Tick() {
    static unsigned char i, pulse;
    ... // Standard switch statements for SM
}

enum RE_States { RE_Start, RE_Wait, RE_LED_ON, RE_LED_OFF }
RE_State;

void RE_Tick() {
    static unsigned char echoes;
    ... // Standard switch statements for SM
}

void main() {
    B = 0;
    TimerSet(200);
    TimerOn();
    GP_State = GP_Start;
    RE_State = RE_Start;
    while (1) {
        GP_Tick();
        RE_Tick();
        while (!TimerFlag){} // Wait for timer period
        TimerFlag = 0; // Lower flag raised by timer
    }
}

```