**The Part 1**

#include **<msp430fr6989.h>**#include **<stdint.h>**#define redLED BIT0  
#define greenLED BIT7  
#define but1 BIT1  
  
**void** main(**void**)  
{  
 WDTCTL = WDTPW | WDTHOLD; *// stop watchdog timer* PM5CTL0 &= ~LOCKLPM5;  
  
 P1DIR |= redLED;  
 P9DIR |= greenLED;  
 P1OUT &= ~redLED;  
 P9OUT &= ~greenLED;  
  
 P1DIR &= ~but1;  
 P1REN |= but1;  
 P1OUT |= but1;  
  
 **for**(;;){  
 **if** ((P1IN & but1) == 0){  
 P1OUT |= redLED;  
 } **else** {  
 P1OUT &= ~redLED;  
 }  
 }  
}

**The Part 2**

#include **<msp430fr6989.h>**#include **<stdint.h>**#define redLED BIT0  
#define greenLED BIT7  
#define but1 BIT1  
#define but2 BIT2  
  
**void** main(**void**)  
{  
 WDTCTL = WDTPW | WDTHOLD; *// stop watchdog timer* PM5CTL0 &= ~LOCKLPM5;  
  
 P1DIR |= redLED;  
 P9DIR |= greenLED;  
 P1OUT &= ~redLED;  
 P9OUT &= ~greenLED;  
  
 P1DIR &= ~(but1|but2);  
 P1REN |= (but1|but2);  
 P1OUT |= (but1|but2);  
  
 **for**(;;){  
 **if** ((P1IN & but1) == 0){  
 P1OUT |= redLED;  
 } **else** {  
 P1OUT &= ~redLED;  
 }  
 **if** ((P1IN & but2) == 0){  
 P9OUT |= greenLED;  
 } **else** {  
 P9OUT &= ~greenLED;  
 }  
 }  
}

**The Part 3**

#include **<msp430fr6989.h>**#include **<stdint.h>**#define redLED BIT0  
#define greenLED BIT7  
#define but1 BIT1  
#define but2 BIT2  
  
**void** main(**void**)  
{  
 WDTCTL = WDTPW | WDTHOLD; *// stop watchdog timer* PM5CTL0 &= ~LOCKLPM5;  
  
 P1DIR |= redLED;  
 P9DIR |= greenLED;  
 P1OUT &= ~redLED;  
 P9OUT &= ~greenLED;  
  
 P1DIR &= ~(but1|but2);  
 P1REN |= (but1|but2);  
 P1OUT |= (but1|but2);  
  
 **for**(;;){  
 **if** ((P1IN & but1) == 0){  
 P1OUT |= redLED;  
 P9OUT &= ~greenLED;  
 **while**((P1IN & but1) == 0){}  
 } **else if** ((P1IN & but2) == 0){  
 P1OUT &= ~redLED;  
 P9OUT |= greenLED;  
 **while**((P1IN & but2) == 0){}  
 } **else** {  
 P1OUT &= ~redLED;  
 P9OUT &= ~greenLED;  
 }  
 }  
}