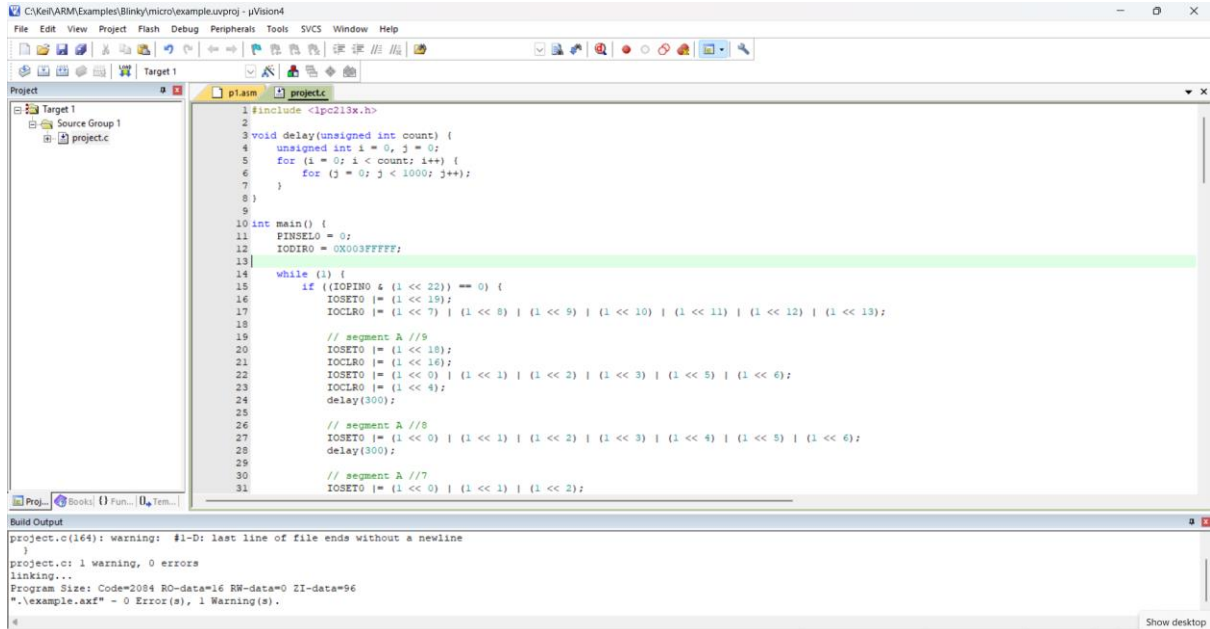


# TRAFFIC LIGHT CONTROL WITH INTERRUPTS

RESULT :



```
#include <gpio213x.h>

void delay(unsigned int count) {
    unsigned int i = 0, j = 0;
    for (i = 0; i < count; i++) {
        for (j = 0; j < 1000; j++);
    }
}

int main() {
    PINSEL0 = 0;
    IODIR0 = 0X003FFFFF;

    while (1) {
        if ((IOPIN0 & (1 << 22)) == 0) {
            IOSET0 |= (1 << 19);
            IOCLR0 |= (1 << 7) | (1 << 8) | (1 << 9) | (1 << 10) | (1 << 11) | (1 << 12) | (1 << 13);

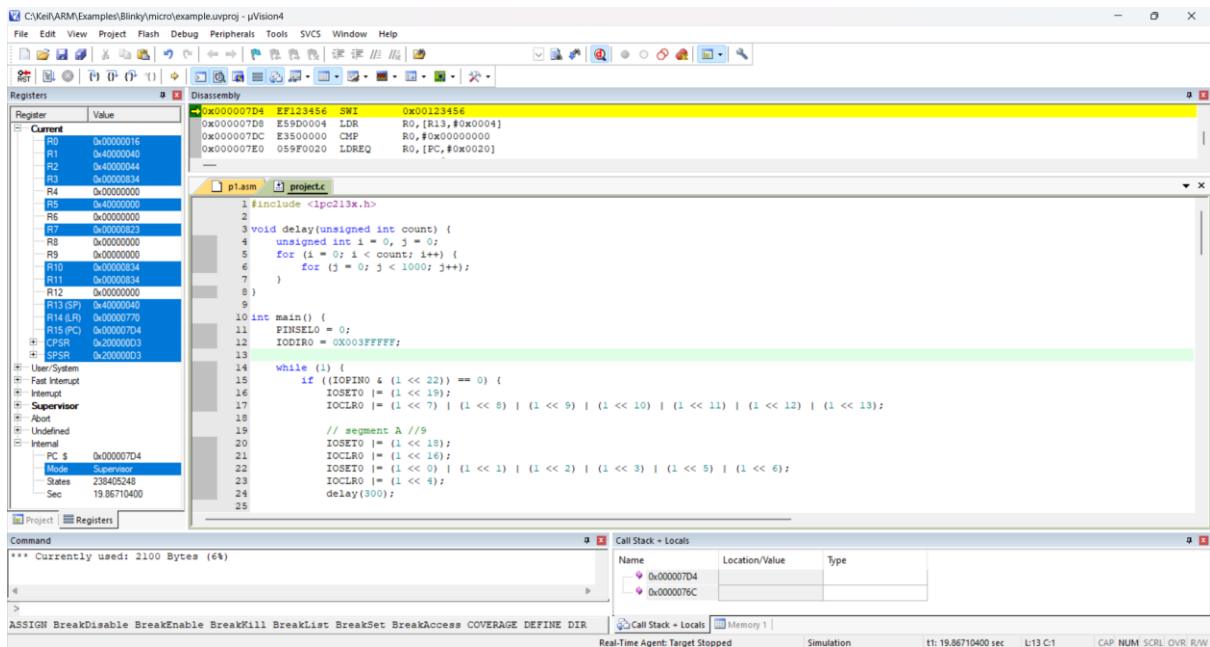
            // segment A //9
            IOSET0 |= (1 << 18);
            IOCLR0 |= (1 << 16);
            IOSET0 |= (1 << 0) | (1 << 1) | (1 << 2) | (1 << 3) | (1 << 5) | (1 << 6);
            IOCLR0 |= (1 << 4);
            delay(300);

            // segment A //8
            IOSET0 |= (1 << 0) | (1 << 1) | (1 << 2) | (1 << 3) | (1 << 4) | (1 << 5) | (1 << 6);
            delay(300);

            // segment A //7
            IOSET0 |= (1 << 0) | (1 << 1) | (1 << 2);
        }
    }
}
```

Build Output

```
project.c(164): warning: #1-D: last line of file ends without a newline
)
project.c: 1 warning, 0 errors
linking...
Program Size: Code=2084 RO-data=16 RW-data=0 ZI-data=96
".\example.axf" - 0 Error(s), 1 Warning(s).
```



Registers

Register	Value
R0	0x00000016
R1	0x40000040
R2	0x40000044
R3	0x00000034
R4	0x00000000
R5	0x40000000
R6	0x00000000
R7	0x00000023
R8	0x00000000
R9	0x00000000
R10	0x00000024
R11	0x00000034
R12	0x00000000
R13 (SP)	0x40000040
R14 (LR)	0x00000070
R15 (PC)	0x0000007D4
CPSR	0x20000003
SPSR	0x20000003

Disassembly

```
0x0000007D4 EF123456 SWI 0x00123456
0x0000007D5 E59D0004 LDR R0,[R13,#0x0004]
0x0000007D6 E3500000 CMP R0,#0x00000000
0x0000007E0 059F0020 LDREQ R0,[PC,#0x0020]
```

Command

```
*** Currently used: 2100 Bytes (6%)
```

Call Stack = Locals

Name	Location/Value	Type
0x0000007D4		
0x0000007C		

Real-Time Agent: Target Stopped Simulation t1: 19.86710400 sec L13 C1 CAP: NUM SCRL OVR: R/W