```
        clr.l   D1
        clr.l   D2
loop    bsr     waitforswitch
        add.l   D0,D1
        sub.l   D0,D2
        bsr     showlights
        bra     loop

showlights
        move.b  D1,lights
        bsr     delay
        move.b  D2,lights
        bsr     delay
        move.b  #0,lights
        rts

waitforswitch
l1      btst.b  #7,switch
        bne     l1
l2      btst.b  #7,switch
        beq     l2
        move.b  switch,D0
        and.b   #%01111111,D0
        rts

delay   move.l  #$70000,D0
dloop   sub.l   #1,D0
        bpl     dloop
        rts

        end
```