Application: Liquid level control application.

The dip switch are the inputs. (4 inputs)

Based on the different combinations of the 4 inputs from the dip switch, I trigger an output on pin number 10.

The output needs to trigger a 5V relay, The output is also indicated by LED1.

Please find my code on the next page.

The logic works fine. But after a couple of hours, I get no output. (Hanged)

This product needs to go out for production. Please help me resolve the issue.

Thanks.

Please find my code on the next page.

```c
#include <htc.h>
#include<pic.h>

// To reverse the logic of DIP switch
#define HIGH        0
#define LOW                 1

#define S1          RA2
#define S2          RA3
#define S3          RA1
#define S4          RA0

#define LED         RB4

#define GROUND_TANK_EMPTY      (S1 == LOW && S2 == LOW)
#define GROUND_TANK_FULL       (S1 == HIGH && S2 == HIGH)

#define UPPER_TANK_EMPTY       (S3 == LOW && S4 == LOW)
#define UPPER_TANK_FULL        (S3 == HIGH && S4 == HIGH)

void main()
{
        unsigned char motor_status;

        TRISA = 0x0F;
        TRISB = 0x00;
        PORTA = PORTB = 0x00;

        motor_status = 0;

        while(1)
        {
                if (motor_status == 0) {
                        if (GROUND_TANK_FULL && UPPER_TANK_EMPTY) {
                                motor_status = 1;
                                LED = 1;
                        }
                }
                else {
                        if (GROUND_TANK_EMPTY || UPPER_TANK_FULL) {
                                motor_status = 0;
                                LED = 0;
                        }
                }
                NOP();
        }
}
```