/\*

\* InterruptTestCode.c

\* This program will implement a counter which prints numbers, but whenever

\* interrupt is detected, it will print which error is detected and continue

\* back into the main program

\*

\*/

#include "InterruptTestCode.h"

void waterLevel (void){printf("Water Level is detected\n Turn on Water Pump\n");}

void voltageLevel (void){printf("Voltage Level is low\n Conserve energy\n");}

void humidityLevel (void){printf("Voltage Level is low\n Turn off Everything\n");}

//main

int main(void){

//set up

if (wiringPiSetup() == -1){

printf(":(\n\r");

return 0;

}

//set up pins

pinMode(WATERLEVELSENSOR,INPUT);

pinMode(VOLTAGELEVEL,INPUT);

pinMode(HUMIDITYLEVEL,INPUT);

//Water Level Sensor

if (wiringPiISR(WATERLEVELSENSOR, INT\_EDGE\_RISING, waterLevel) != 0){

return (-1);

}

//Voltage Level Sensor

if (wiringPiISR(VOLTAGELEVEL, INT\_EDGE\_RISING, voltageLevel) != 0){

return (-1);

}

//Humidity Level Sensor

if (wiringPiISR(HUMIDITYLEVEL, INT\_EDGE\_RISING, humidityLevel) != 0){

return (-1);

}

int read = 0;

//count

for(int i=0; i<=50000; i++){

printf("Iteration: %d\n\r", i);

read = digitalRead(VOLTAGELEVEL);

printf("reading the value of %d\n\r",read);

delay(1000);

}

return 0;

}