# Description:

Write a program to create fusion of potentiometer and LDR to allow user set threshold.

# Source Code:

// including LCD Library

#include <LiquidCrystal.h>

// initialize the library with the numbers of the interface pins

LiquidCrystal lcd(11,12, 14, 15, 16, 17);

// declaring Potentiometer and LDR interface pins and input variable

int pot = A4;

int LDR = A5;

void setup()

{

// set up the LCD's number of columns and rows:

lcd.begin(16, 2);

lcd.clear();

// accept potentiometer and LDR input

pinMode(pot, INPUT);

pinMode(LDR, INPUT);

}

void loop()

{

lcd.setCursor(0,0); // set the cursor to col 0 and row 0 of LCD

lcd.print("Pot Value:"); // prints potentiometer value to LCD

lcd.print(analogRead(pot)); // prints value on variable: pot to LCD

lcd.setCursor(0,1); // set the cursor to col 0 and row 1 of LCD

lcd.print("LDR Value:"); // prints LDR value to LCD

lcd.print(analogRead(LDR)); // prints value on variable: LDR to LCD

if(LDR<pot)

{

digitalWrite(7, HIGH);

}

else

{

digitalWrite(7, LOW);

}

}

# Libraries:

No additional libraries required.

# Functions:

*pinMode(pot, INPUT):*

This is used to read an input from the variable ‘pot’, here the variable ‘pot’ assumes the pin number A4 where the potentiometer is connected for reading potentiometer input.

*pinMode(LDR, INPUT):*

This is used to read an input from the variable ‘LDR’, here the variable ‘LDR’ assumes the pin number A5 where the LDR sensor is connected for reading LDR input.

*analogRead(pot):*

This is used to read analog input from the specified pin. Here it reads analog input value from pin A4 which provides an analog voltage upto 1024 digital levels.

*analogRead(LDR):*

This is used to read analog input from the specified pin. Here it reads analog input value from pin A5 which provides an analog voltage upto 1024 digital level.

digitalWrite(7,HIGH):

It generates the specified value output at the pin. High generates 5v to the connection, which is the buzzer here.

digitalWrite(7,LOW):

Low generates 0v to the connection, which is the buzzer here.