# Description:

Write a program to ON/OFF Buzzer on LDR sensor and show its value on LCD.

# 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 ldr interface pins and input variable

int ldrPin = A5;

void setup()

{

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

lcd.begin(16, 2);

lcd.clear();

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

// accept ldr input

pinMode(ldrPin, INPUT);

}

void loop()

{

int ldrStatus = analogRead(ldrPin);

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

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

if(ldrStatus <= 1000)

{

digitalWrite(7, HIGH);// toggle buzzer high on ldr value less than or equal to 1000

delay(1000);

}

else

{

digitalWrite(7, LOW);// toggle buzzer low on ldr value more than 1000

delay(1000);

}

}

# Libraries:

No additional libraries required.

# Functions:

*pinMode(ldrPin, INPUT):*

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

*analogRead(ldrPin):*

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 levels.

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.