# Description:

Program to trigger buzzer based on the IR sensor.

# Source Code:

//include library coode

#include <LiquidCrystal.h>

int irPin = 3; // This is our input pin (IR LED at pin D2)

int sensorOut = HIGH; // HIGH at No Obstacle

const int buzzerPin = 7;

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

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

void setup()

{

//Initialize the LCD in 16x2 mode

lcd.begin(16, 2);

delay(1000);

//Set cursor at first character/coloumn of first line/ro

lcd.setCursor(0,0);

//Print the message as metioned cursor location

lcd.print(" IomaTic ");

//Initialize a serial communication with baud rate 9600

Serial.begin(9600);

delay(1000);

pinMode(irPin, INPUT);

Serial.begin(9600);

}

void loop()

{

sensorOut = digitalRead(irPin);

if (sensorOut == LOW)

{

lcd.print("Obstacle Detected");

//Set cursor at first character/coloumn of first line/row

lcd.setCursor(0,1);

//Print the message as metioned cursor location

digitalWrite(buzzerPin, HIGH);

}

else

{

lcd.println("No Obstacle");

//Set cursor at first character/coloumn of first line/row

lcd.setCursor(0,1);

//Print the message as metioned cursor location

digitalWrite(buzzerPin, LOW);

}

delay(100);

lcd.clear();

}

# Libraries:

No additional libraries required.

# Functions:

pinMode(buzzerPin,10):

This is used to set a digital out on the pin number, here the digital out is at pin 10 where relay 1 is connected for the buzzer.

pinMode(buttonPin,9):

The digital out is at pin 9 where relay 2 is connected for the button.

digitalRead(buttonPin):

It reads the input from the specified pin, here is read the state of the button pin. It can return High or Low if the pin is not connected to anything.

digitalWrite(buzzerPin,HIGH):

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

digitalWrite(buzzerPin,LOW):

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