

Ex.No :

IR SENSOR

Date :

AIM:

To develop a program to identify the interruptions by using IR LED sensor with Arduino UNO Board.

COMPONENTS REQUIRED:

COMPONENTS	NOS
ARDUINO UNO	1
IR OBSTACLE SENSOR	1
LED	1

PROCEDURE:

Step 1: Wiring the IR obstacle sensor with Arduino Uno using jumper wires

Step 2: Connect VCC (3rd pin) of IR sensor to 5v on Arduino

Step 3: Connect GND (2nd pin) of IR sensor to GND on Arduino

Step 4: Connect OUT (1st pin) of IR sensor to 3rd pin on the Arduino

Step 5: Connect LED positive to the pin 13 on Arduino and another end to the GND of the Arduino

Step 6: Open Arduino IDE to code the Program, Upload the Code.

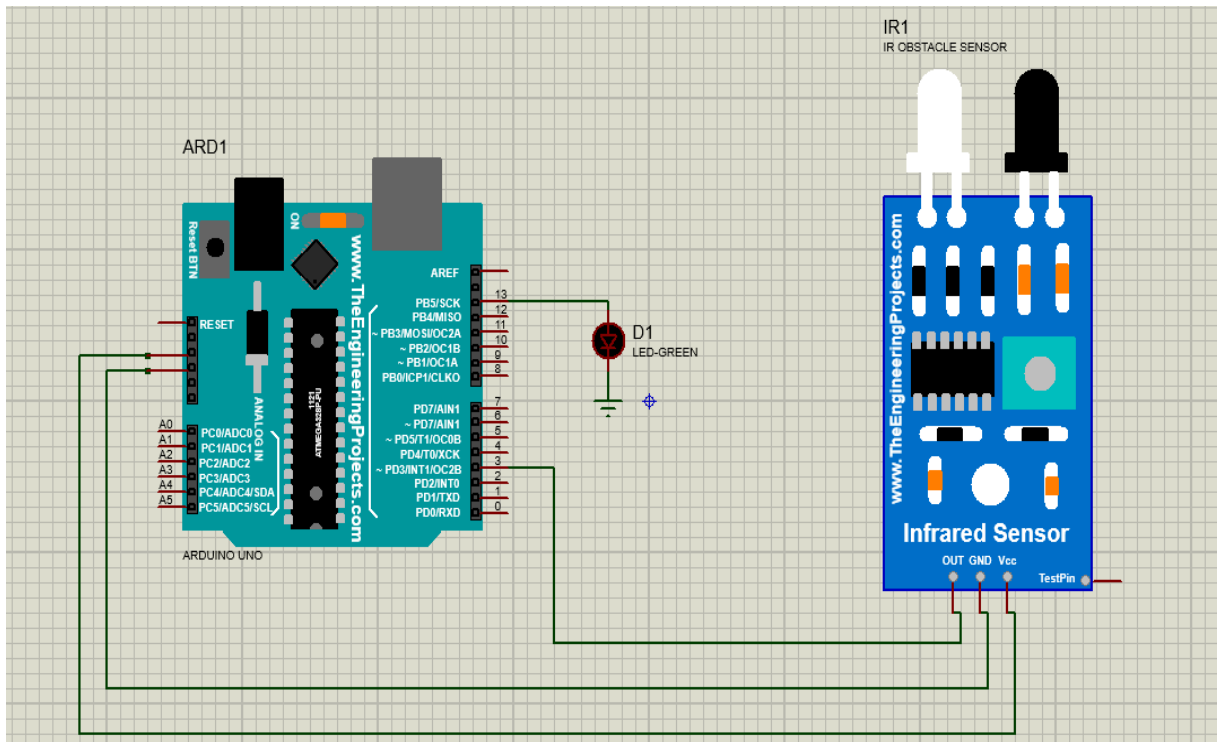
Step 7: Connect your Arduino to the computer via USB.

Step 8: Open the Arduino IDE and select your board type and COM port.

Step 9: Click on the Upload button to upload the code to your Arduino.

Step 10: Once the code is uploaded, the IR sensor senses the interruptions occur in front of the sensor and blinks the Led light if the interruption occurs.

SCHEMATICDIAGRAM:

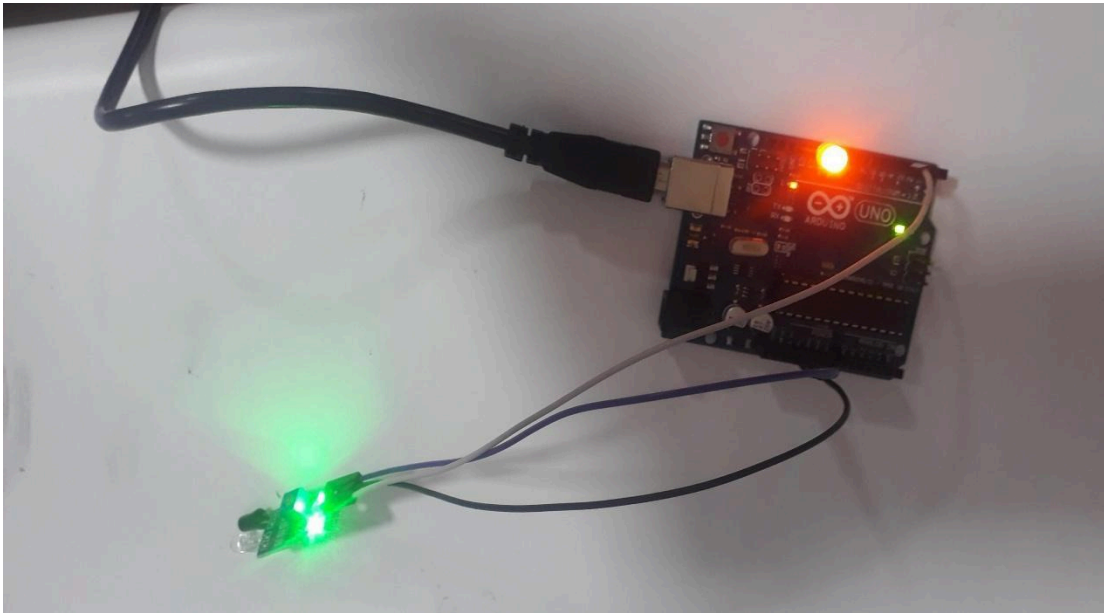


PROGRAM:

```
void setup()
{
  pinMode(13,OUTPUT);
  pinMode(3,INPUT);
  Serial.begin(9600);
}

void loop()
{
  if (digitalRead(3)== LOW)
  {
    digitalWrite(13,HIGH);
    delay(10);
  }
  else
  {
    digitalWrite(13,LOW);
    delay(10);
  }
}
```

OUTPUT:



RESULT:

Thus the above program to simulate IR LED SENSOR using Arduino UNO to identify Interruptions was successfully executed and verified.