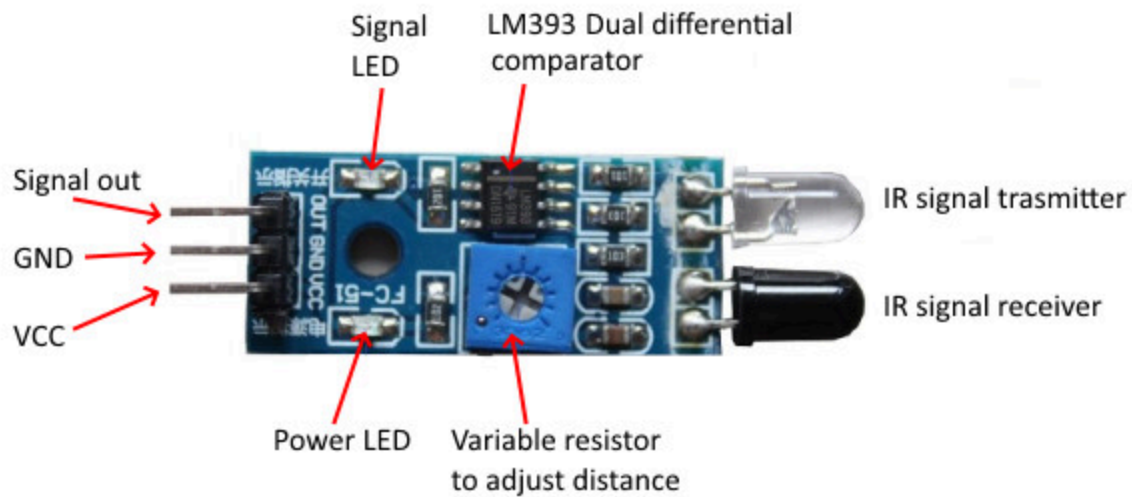


### Signals and connections of the FC-51 Proximity sensor



**VCC** – 3.3 to 5 VDC Supply Input pin

**GND** – Ground Input pin

**Signal out** – Digital output pin. LOW when obstacle is in range

**Power LED** – Illuminates when power is applied

**Signal LED** – Illuminates when obstacle is detected

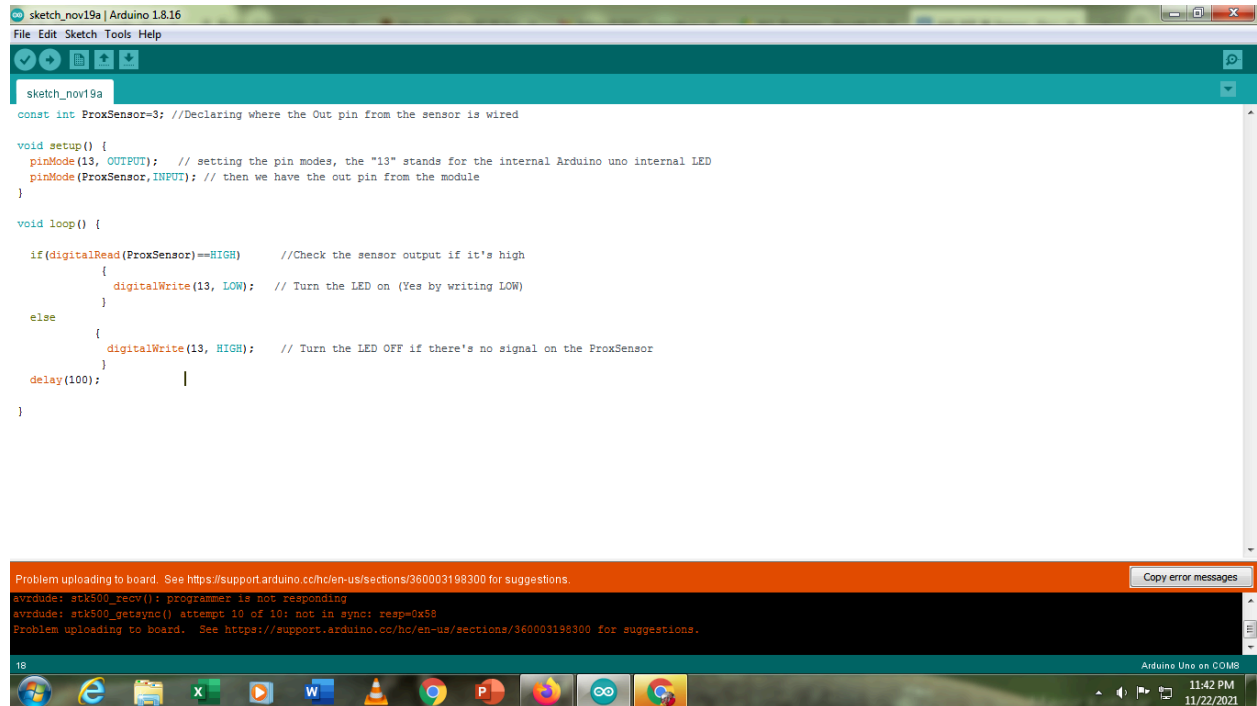
**Variable resistor** – Adjust detection distance. CCW decreases distance.

CW increases distance.

## Program file:

```
void setup() {  
  // put your setup code here, to run once:  
  pinMode(2,INPUT);  
  pinMode(13,OUTPUT);//LED  
}  
  
void loop() {  
  // put your main code here, to run repeatedly:  
  if(digitalRead(2)!=LOW){  
    digitalWrite(13,HIGH);  
  }  
  else{  
    digitalWrite(13,LOW);  
  }  
}
```

}



The screenshot shows the Arduino IDE interface. The top menu bar includes File, Edit, Sketch, Tools, and Help. The toolbar contains icons for opening, saving, and running the sketch. The sketch name is 'sketch\_nov19a'. The code in the editor is as follows:

```
const int ProxSensor=3; //Declaring where the Out pin from the sensor is wired

void setup() {
  pinMode(13, OUTPUT); // setting the pin modes, the "13" stands for the internal Arduino uno internal LED
  pinMode(ProxSensor, INPUT); // then we have the out pin from the module
}

void loop() {
  if(digitalRead(ProxSensor)==HIGH) //Check the sensor output if it's high
  {
    digitalWrite(13, LOW); // Turn the LED on (Yes by writing LOW)
  }
  else
  {
    digitalWrite(13, HIGH); // Turn the LED OFF if there's no signal on the ProxSensor
  }
  delay(100);
}
```

An orange error banner at the bottom of the IDE window reads: "Problem uploading to board. See <https://support.arduino.cc/nc/en-us/sections/360003198300> for suggestions." A "Copy error messages" button is on the right. The error details in the console are:

```
avrdude: stk500_recv(): programmer is not responding
avrdude: stk500_getsync() attempt 10 of 10: not in sync: resp=0x58
Problem uploading to board. See https://support.arduino.cc/nc/en-us/sections/360003198300 for suggestions.
```

The status bar at the bottom indicates "18" and "Arduino Uno on COM8". The Windows taskbar at the very bottom shows various application icons and the system clock displaying "11:42 PM 11/22/2021".