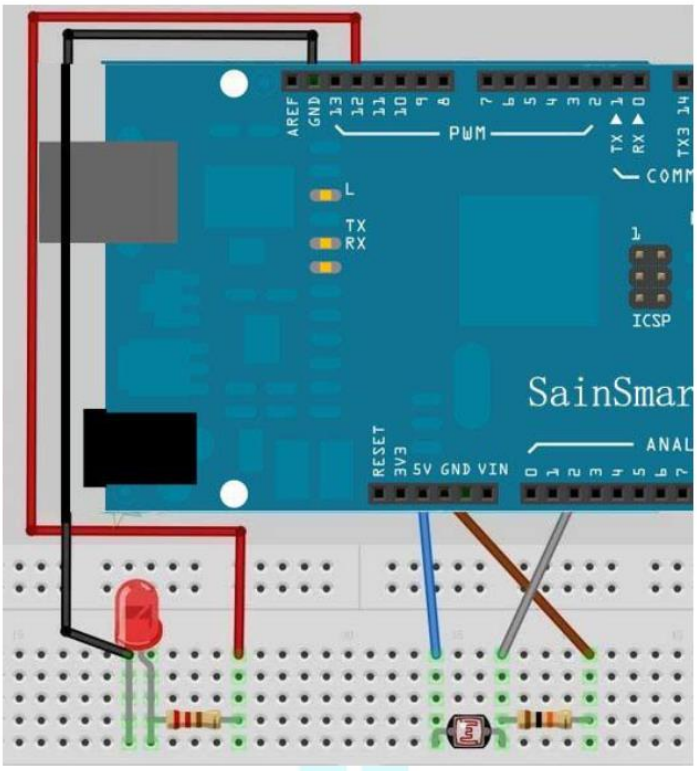
USING A PHOTORESISTOR

A photoresistor or Light Dependent Resistor (LDR) is basically a resistor that has a resistor that varies depending on how much light it is absorbing. A photoresistor is made of a high resistance semiconductor that absorbs photons and based on the quantity and frequency of the absorbed photons the semiconductor material give bound electrons enough energy to jump into the conduction band.

Wire the following circuit:




```
int photocell = 2;
int ledPin = 12;
int lightAmount=0;

void setup(){
  pinMode(ledPin, OUTPUT);
  Serial.begin (9600);
}

void loop(){
  lightAmount = analogRead(photocell);
  Serial.println (lightAmount);
  if (lightAmount<=100){
    digitalWrite(ledPin, HIGH);}
    else
    {digitalWrite(ledPin, LOW);}
}
```

View the lightAmount being read in by looking at the Serial Monitor (click Tools… Serial Monitor)
Play around with the sensitivity. Increase the number and decrease the number.