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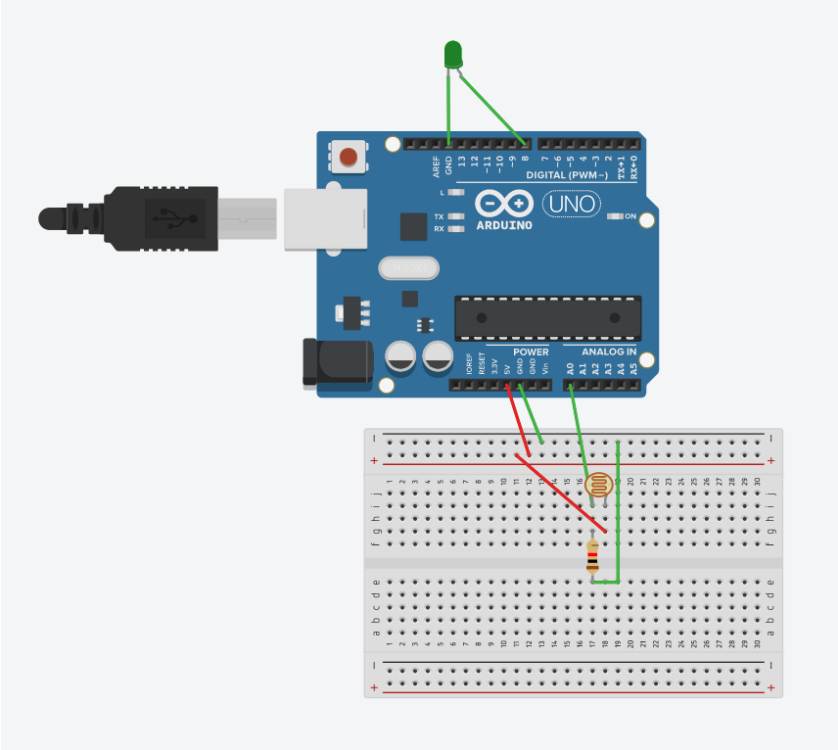
PROGRAM TITLE: LDR-NIGHT LIGHT SIMULATION

Aim: DEMONSTRATE AND SHOW ON/OFF OF A LED USING LDR-NIGHT LIGHT SIMULATION

Hardware Required:

- Arduino Board
- LED
- Photoresistor
- Resistor
- Breadboard

Circuit Diagram:



Write-Up:

Name: Sakshi Srivastava Date 30/9/2020

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AIM: Demonstrate to show ON/OFF of a LED using LDR - Night Light simulation.

Hardware Required:-

→ LED
→ Arduino Board
→ Photoresistor
→ Resistor
→ Breadboard

CODE:

```
const int ledPin = 8;
const int ldrPin = A0;

void setup()
{ Serial.begin(9600);
  pinMode (ledPin, OUTPUT);
  pinMode (ldrPin, INPUT);
}
void loop()
{
  int ldrStatus = analogRead (ldrPin);
  Serial.println(ldrstatus);
```

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```
if(ldrStatus <=10)
{
  digitalWrite (ledPin, HIGH);
  Serial.println ("LDR is DARK, LED is ON");
}
else
{ digitalWrite (ledPin, LOW);
  Serial.println("---------");
}
}
```

CODE:

```
const int ledPin = 8;
const int ldrPin=A0;


void setup()
{
  Serial.begin(9600);
  pinMode(ledPin,OUTPUT);
  pinMode(ldrPin,INPUT);
}
void loop()
{
  int ldrStatus = analogRead(ldrPin);
  Serial.println(ldrStatus);
  if(ldrStatus<=10)
  { digitalWrite(ledPin,HIGH);
    Serial.println("LDR is DARK,LED is ON");
  }
  else
  { digitalWrite(ledPin, LOW);
    Serial.println("----------------");
  }
}
```

OUTPUT/OBSERVATION:

LED is ON.