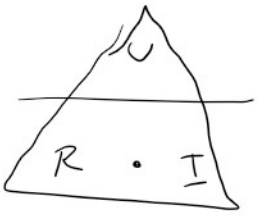
20200508

Freitag, 8. Mai 2020 08:34

$U_{LED} = 1{,}7\,V$ $\quad I_{LED} = 55\,mA = 0{,}055\,A$

$U = R \cdot I$



Ges R_{VOR}

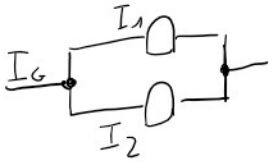
Lsg $U_{VOR} = 5V - 1{,}7V = 3{,}3V$

$$R_{VOR} = \frac{U_{VOR}}{I_{LED}} = \frac{3{,}3V}{0{,}055A} = 60\,\Omega$$

Angenommen: $I_{LED} = 10{,}5\,mA$

max. Ausgangsstrom von $I_G = 33\,mA$

Beh 2 LED können parallel angeschlossen werden

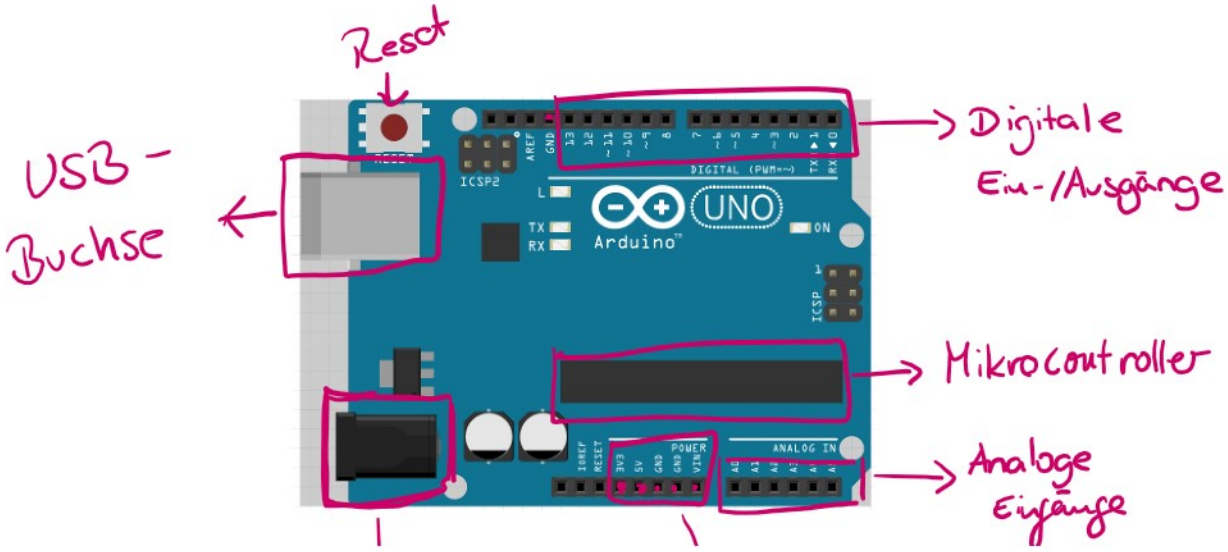


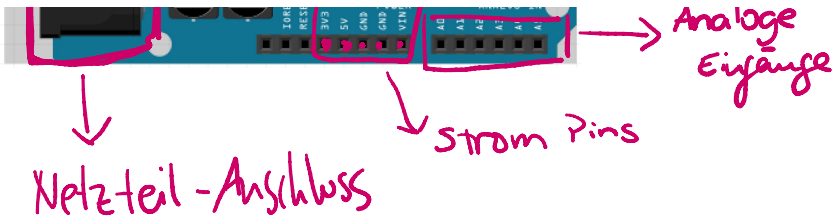
$33mA > 2 \cdot 10{,}5\,mA$

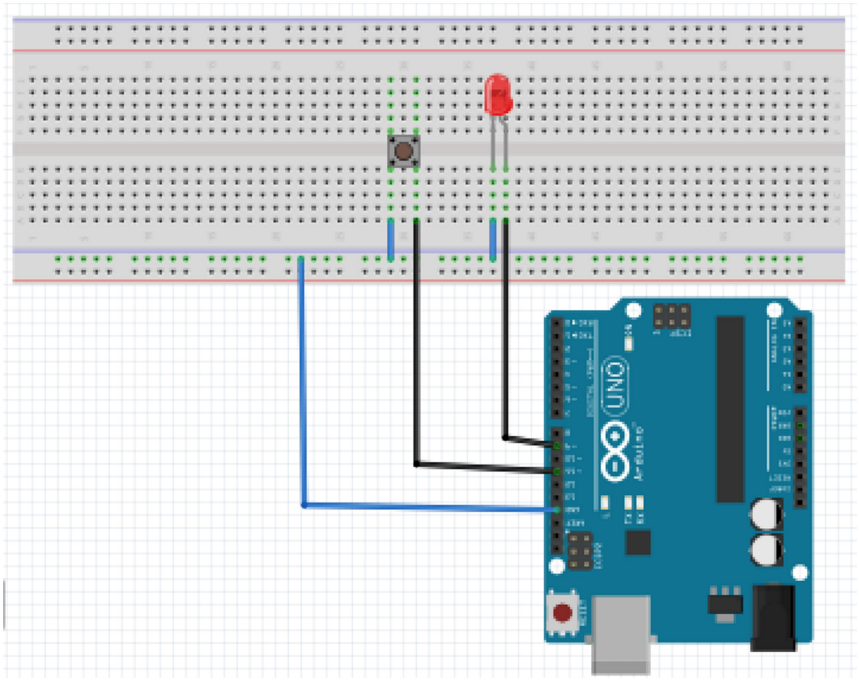
=> Beh ist wahr

N	J
1	8

2 E







LED an Pin 9
Taster an Pin 11

→ Bei Betätigung des Tasters leuchtet die LED zweimal für 3 Sekunden Pause 0,5 Sekunden

```
int led = 9;
int taster = 11;

void setup() {

pinMode(led,OUTPUT);
pinMode(taster,INPUT_PULLUP);

}
void loop() {

if (digitalRead(taster) == LOW) {
    digitalWrite(led,HIGH);
    delay(3000);
    digitalWrite(led,LOW);
```

```
    delay(500);
    digitalWrite(led,HIGH);
    delay(3000);
    digitalWrite(led,LOW);

}



}
```