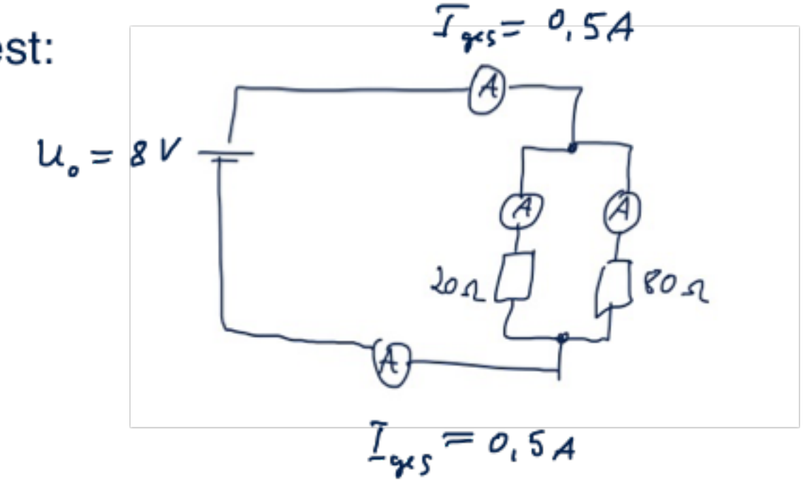
Test:



$$\frac{1}{R_{ges}} = \frac{1}{20\,\Omega} + \frac{1}{80\,\Omega} = \frac{4}{80\,\Omega} + \frac{1}{80\,\Omega} = \frac{5}{80\,\Omega} \Rightarrow R_{ges} = 16\,\Omega$$

$$I_{ges} = \frac{U_0}{R_{ges}} = \frac{8\,V}{16\,\Omega} = 0{,}5\,A$$

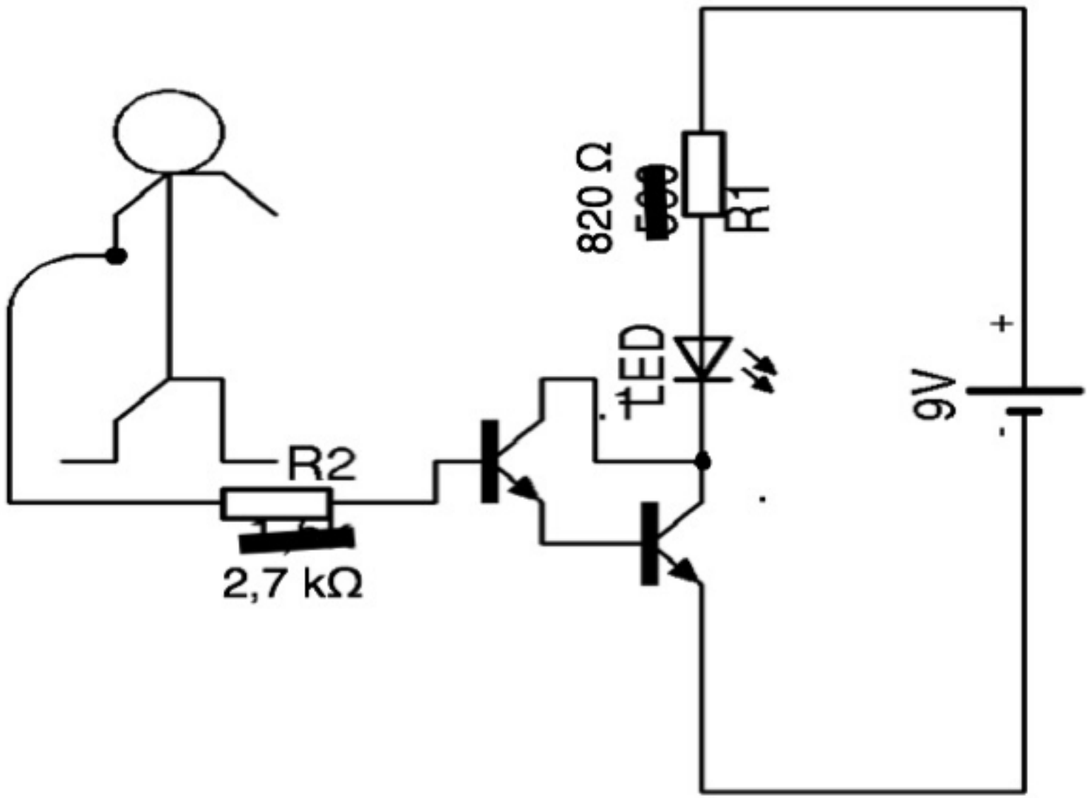
$$\frac{R_2}{R_1} = \frac{I_1}{I_2} \Leftrightarrow R_2 \cdot I_2 = U_0 = R_1 \cdot I_1$$

$$\Rightarrow I_1 = \frac{U_0}{R_1} = \frac{8\,V}{20\,\Omega} = 0{,}4\,A$$

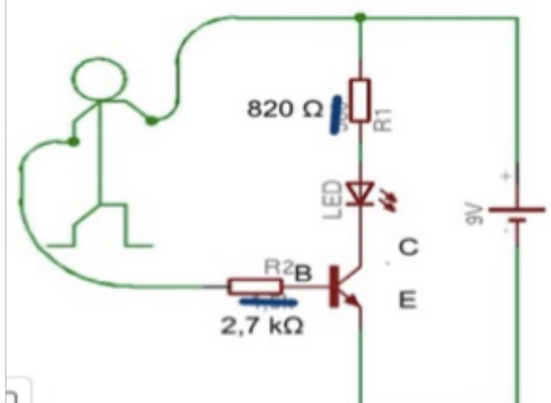
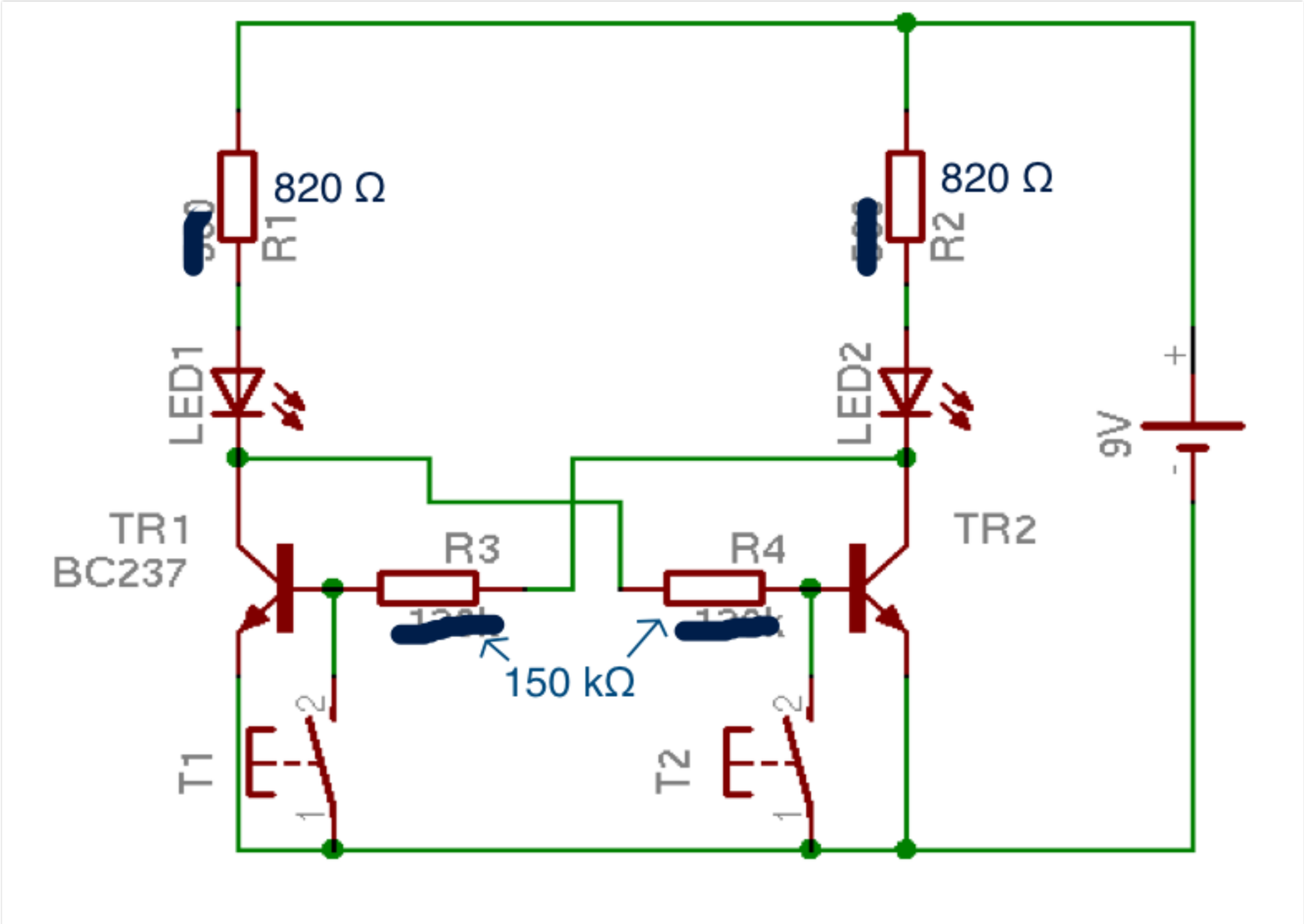
$$I_2 = \frac{8\,V}{80\,\Omega} = 0{,}1\,A$$

Probe: $I_1 + I_2 = 0{,}5\,A = I_{ges}$

Mehrstufige Verstärkerschaltungen
Die Darlington-Schaltung



aus der letzten Stunde:



Die FlipFlop-Schaltung: ein 1-bit-Speicher