

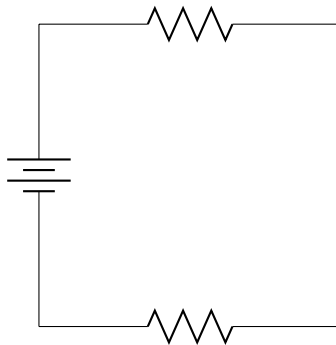
P01 Report

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Chapter 1

Theoretical part

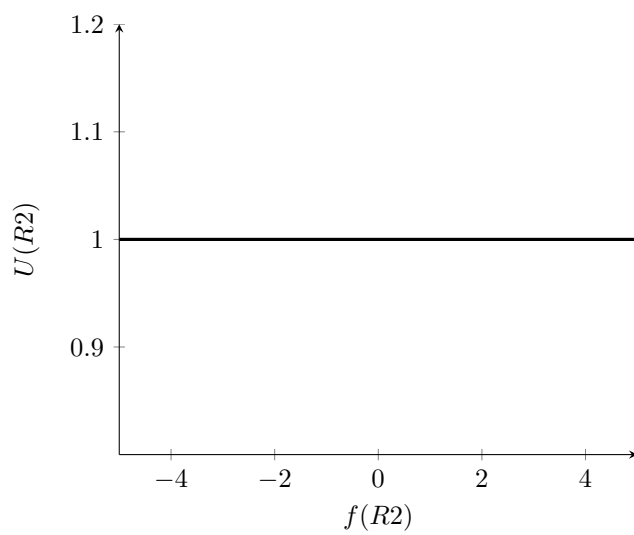


Electrical Circuit Diagram

1.1 Circuit Calculation

Theoretical calculation of the circuit $V_1=12.5\text{V}$ $R_1=3\text{ohm}$ $R_2=6\text{ohm}$ $V_R = (R \times V_T) / R_T$ $V_{R1}= (R_1 \times V_1) / R_T = 12.5 \text{ V}$ $V_{R2}= (R_2 \times V_2)/ R_T = 8.333 \text{ V}$

V1	12.5V
R1	3ohm
R2	6ohm
UR1	12.5V
UR2	8.33V



Chapter 2

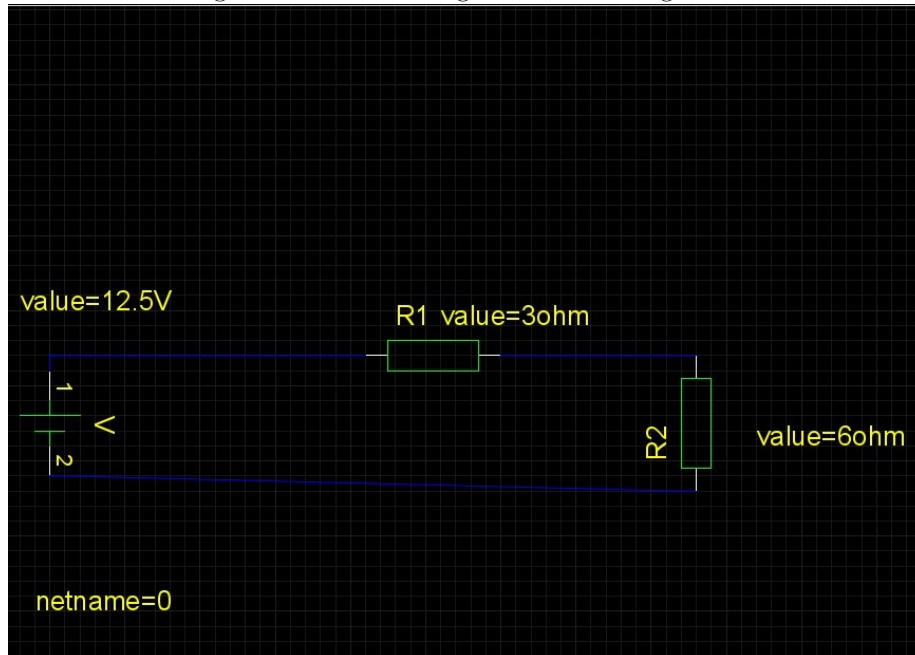
Practical part

Practical Calculation

2.1 Work with GEDA programs'

2.1.1 'Work with gschem'

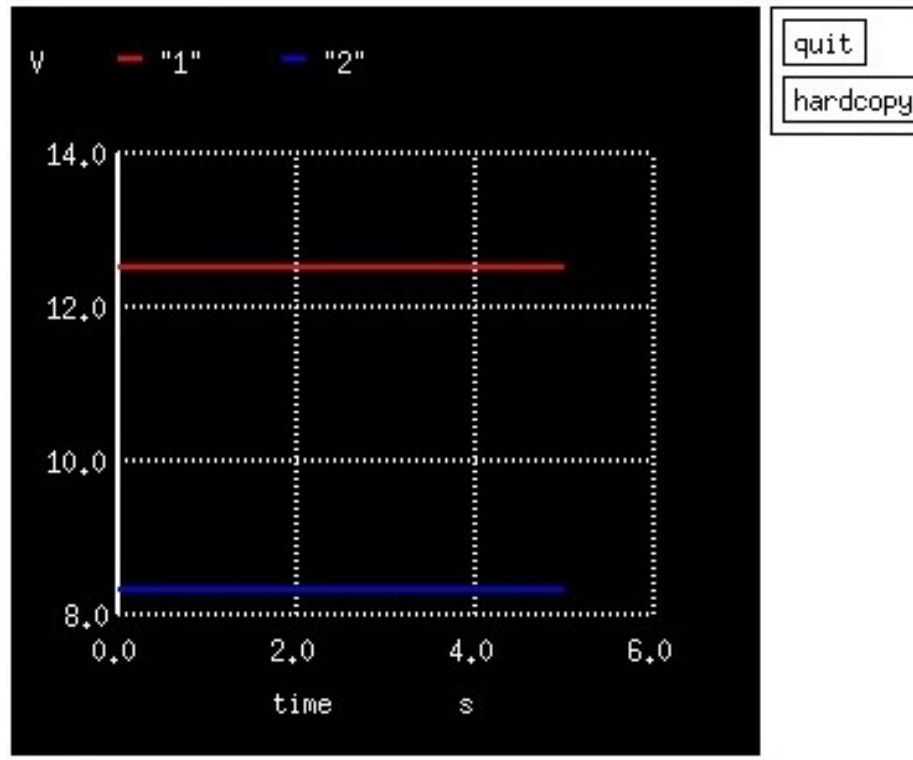
Figure 2.1: Circuit Diagram createed in gscehm



2.1.2 'Work with gnetlist'

2.1.3 'Work with ngspice'

Figure 2.2: The plotted graph after using ngspice



2.2 'Work with QUCS programs'

Image of Schematics

DC simulation

Curve and Table obtained from DC Simulation

Figure 2.3: Circuit Diagram in QUCS

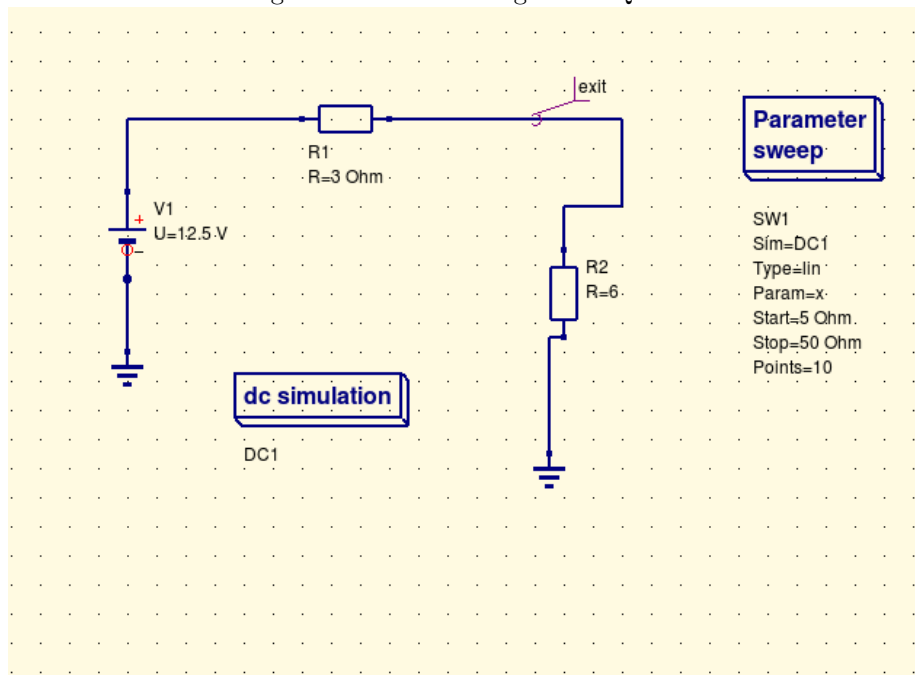


Figure 2.4: DC Simulation

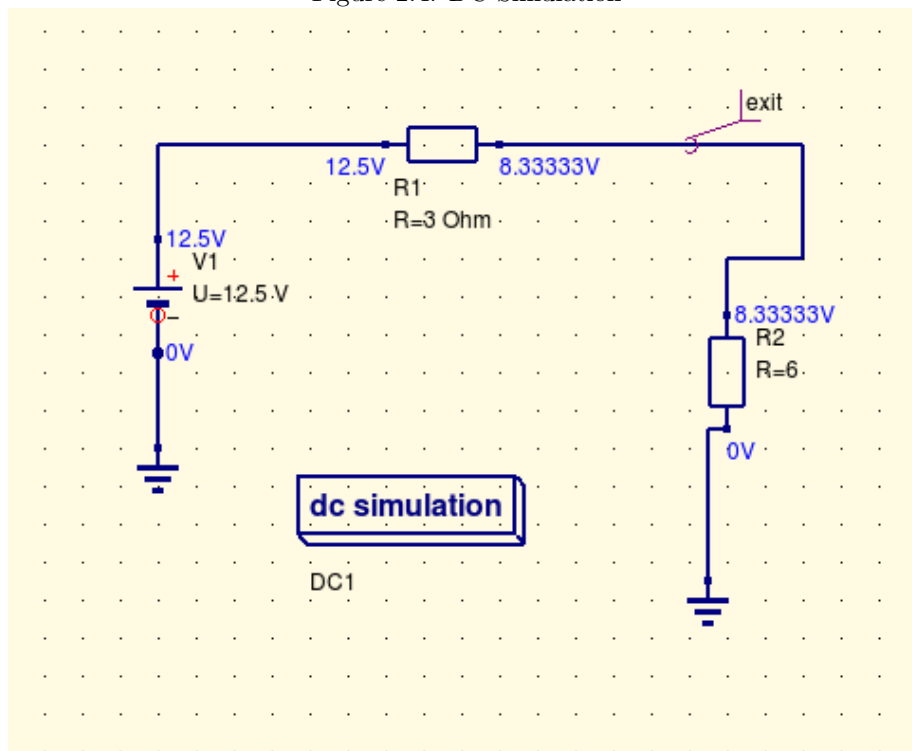
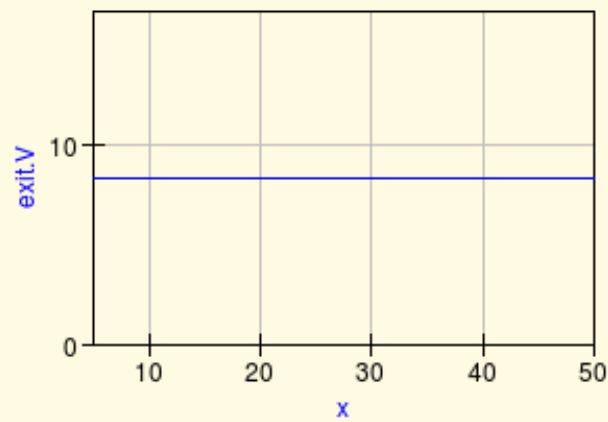
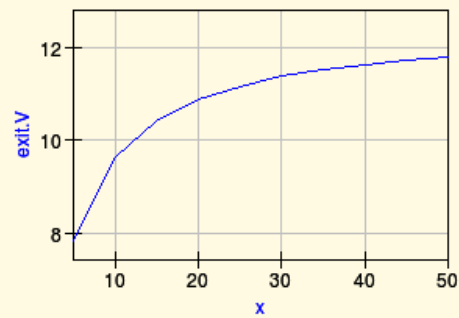


Figure 2.5: The following graph shows the DC simulation for the various obtained values



x	V1.I	x
5	-1.39	→
10	-1.39	
15	-1.39	
20	-1.39	
25	-1.39	
30	-1.39	
35	-1.39	
40	-1.39	
45	-1.39	
50	-1.39	

Figure 2.6: The following graph shows the Sweep Simulation for the various obtained values



Equation
UR2=f(R2)

x	V1.I	
5	-1.56	
10	-0.962	
15	-0.694	
20	-0.543	
25	-0.446	
30	-0.379	
35	-0.329	
40	-0.291	
45	-0.26	
50	-0.236	