

Laboratorijas darba 1 atskaite "Vienkru  
elektrisku shmu modelana"

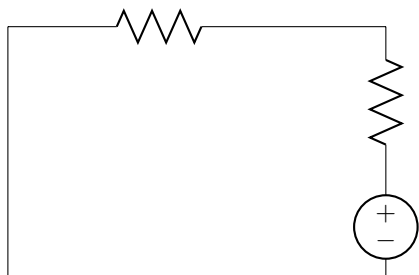
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# Chapter 1

## Teortisk daa

Uzdevums bija apinat spriegumus uz rezistoriem dotaj shm. Sprieguma avota V1 sprieguma vrtbu  $U$  (Volts) izvlities daskaitli, kas btu Jsua apliebas pdjie trs cipari dalti ar 10. Mans apliebas numurs ir 171REB112, tatl 112/10= 11.2, tad no tas skojam, k  $V1 = 11.2$  (Volti), R1 ir apliebas pdjo 3 ciparu otrais numurs+1, R2 ir apliebas numura pdjais cipars +1. Tlad 171REB112, 112 ir pdejie trs cipari mana apliebas numura, lai noteikt ar ko ir viends R1,mms vajag pie otra cipara (no skaita 112) pievienot 1. No tam sekojam  $1+1=2$ , tad  $R1=2$ .Lai noteikt ar ko ir viends R2, mms vajag pie trea cipara (no skaita 112) pivienot ar 1, ka iepriekaja gadjuma. Tad,  $2+1=3$   $R2=3$ .



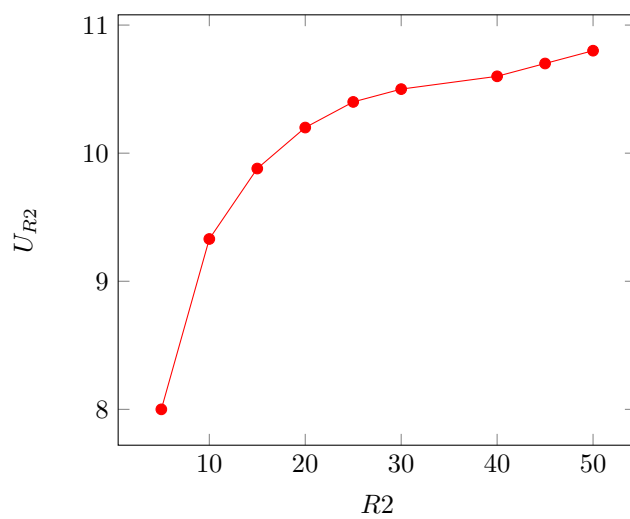


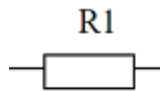
Figure 1.1:  $U_{R2}=f(R2)$  grafiks, pc sweep simulcijas datiem.

## 1.1 des aprins

$R1$	2 Om
$R2$	3 Om
$V1$	11.2 V
$U_{R2}$	20
$U_{R1}$	20

Table 1.1: Sprieguma un pretestbas tabula

Figure 1.2: Shma



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## Chapter 2

# Praktisk daa

### 2.1 Darbs ar GEDA programmm

#### 2.1.1 darbs ar gschem

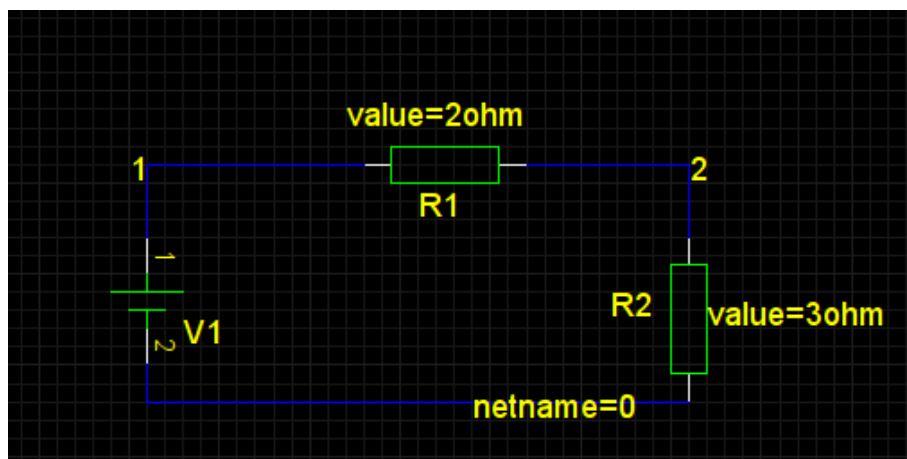


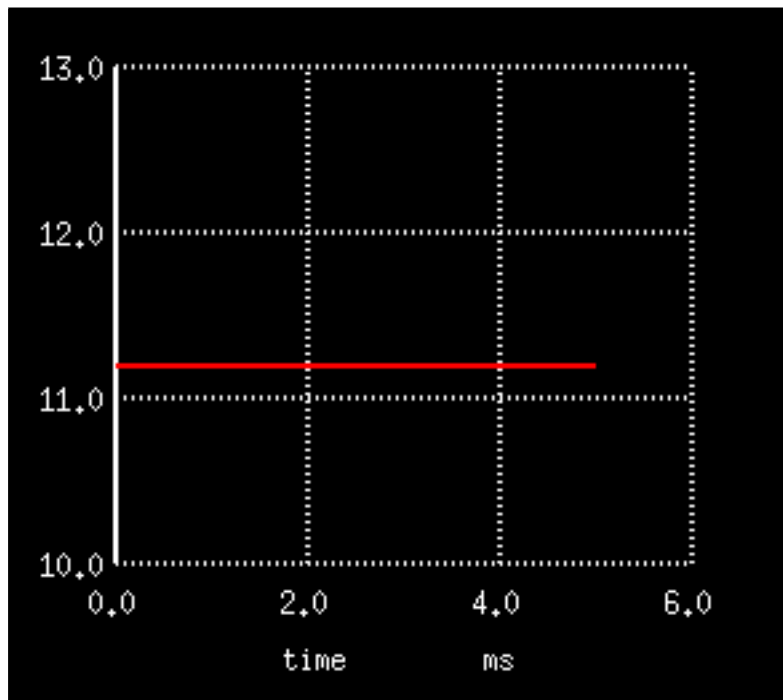
Figure 2.1.1: Elektriska shma gschem vid

#### 2.1.2 darbs ar gnetlist

```
* Spice netlister for gnetlist
R2 0 2 3ohm
V1 1 0 11.2
R1 1 2 2ohm
.END
```

Figure 2.1.2: Rezulttu parbaude ar gnetlist

### 2.1.3 darbs ar ngspice



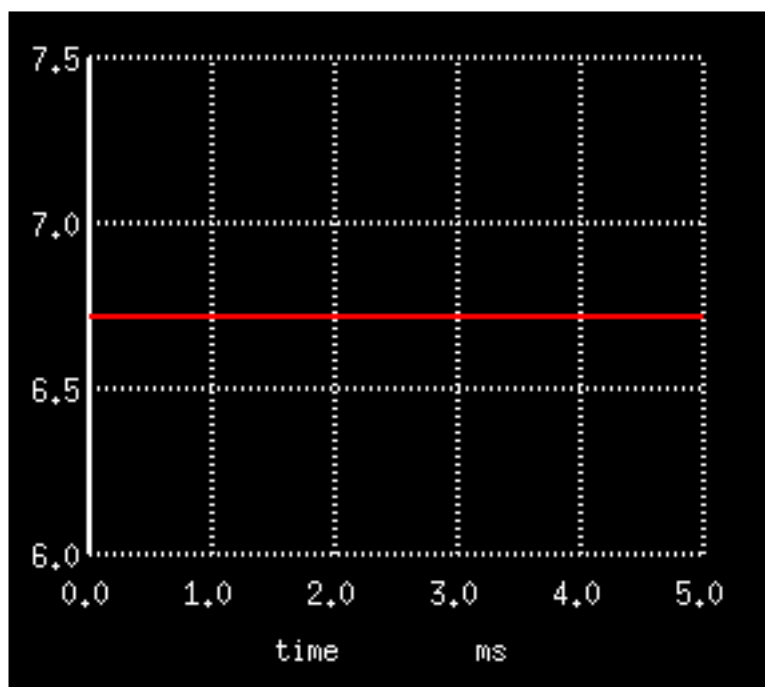


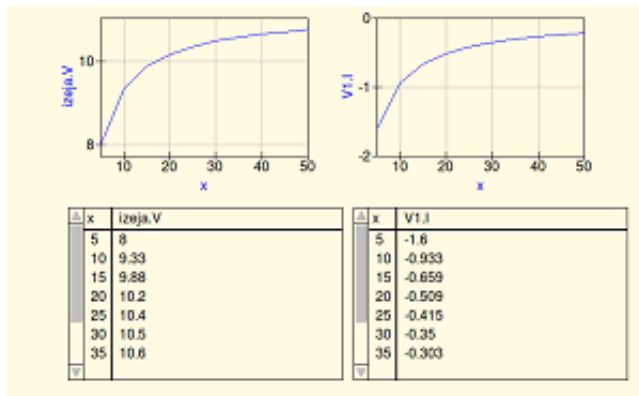
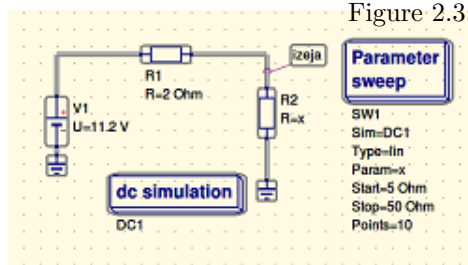
Figure 2.1: NGspice iegtaie sprieguma grafiki

## 2.2 Darbs ar QUCS programmm

Figure 2.2: QUCS Shmas modelis

### 2.2.1 Tabula un grafiks

Figure 2.3: Iegtie rezultti QUCS





# Bibliography

- [1] Berga, I., Ceske, E., ekstere, I. u.c. *Siguldas novadmcba.* (Latvia) [*Siguldas novadmcba*] Berga, I., Ceske, E., ekstere, I. u.c. Rga: Preses nams, 2002. 186 lpp. ISBN 9984-19-250-4.
- [2] Joseph Heller *Catch-22*. Published September 4th 2004 by Simon and Schuster (first published 1961)