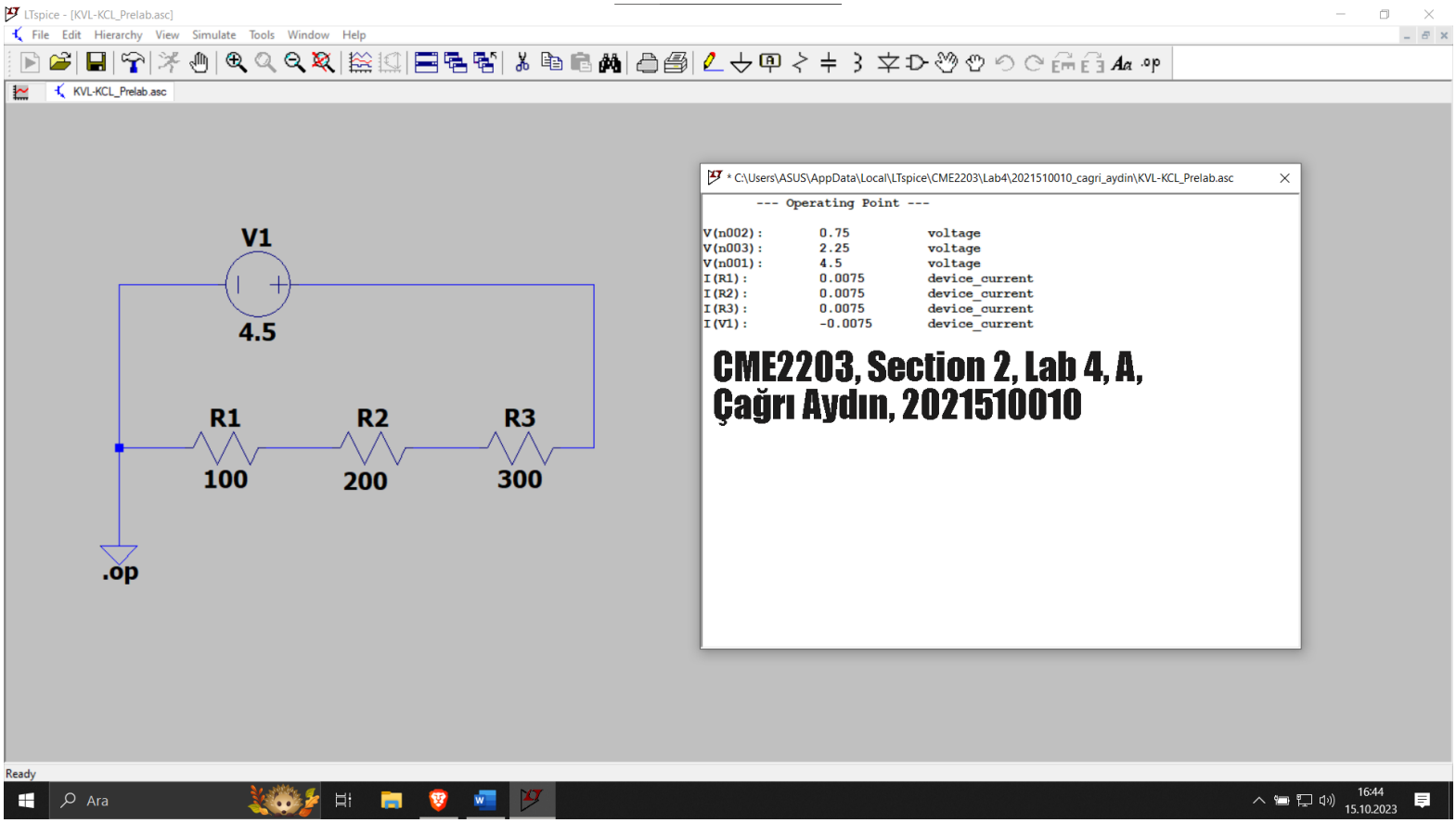
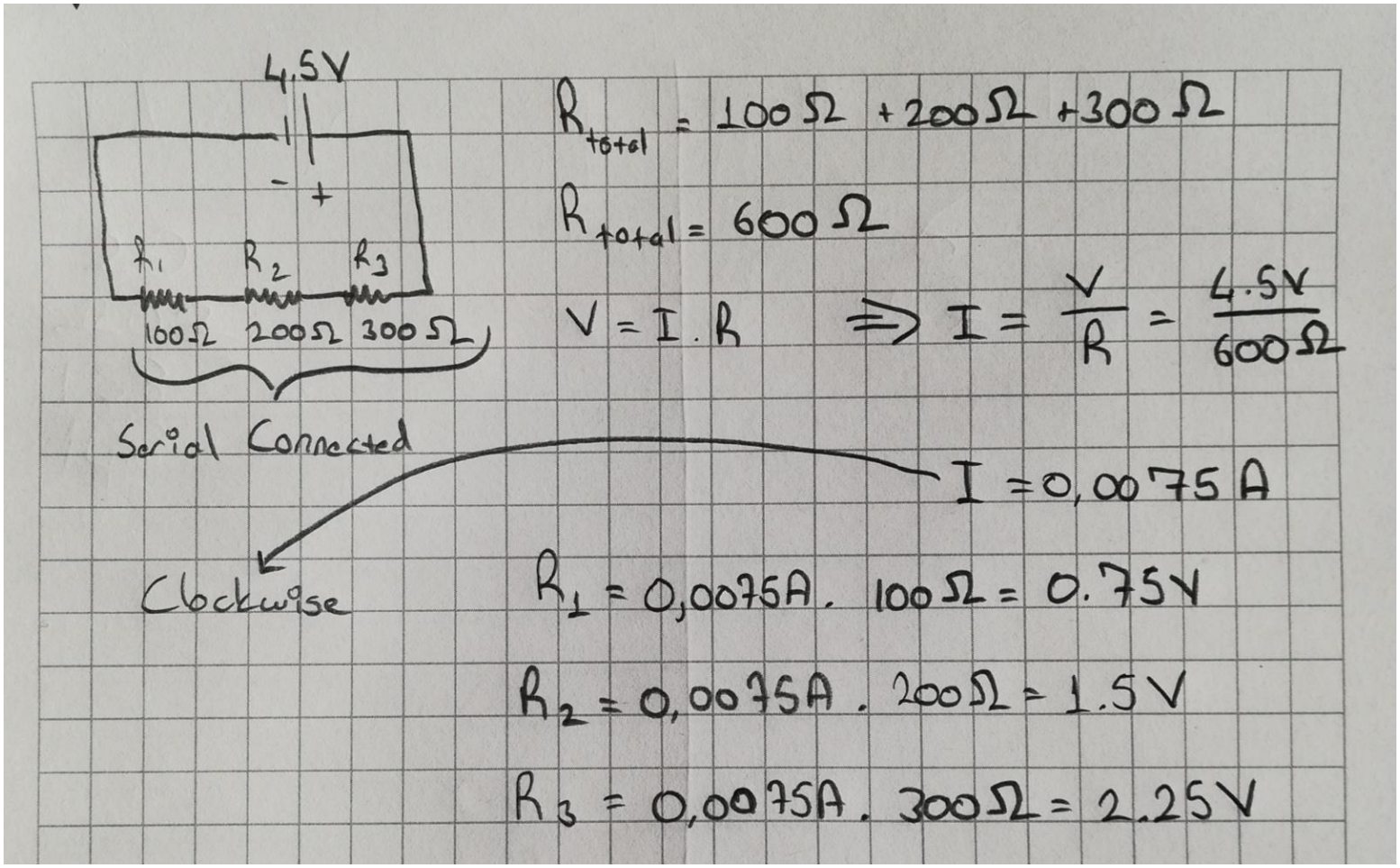
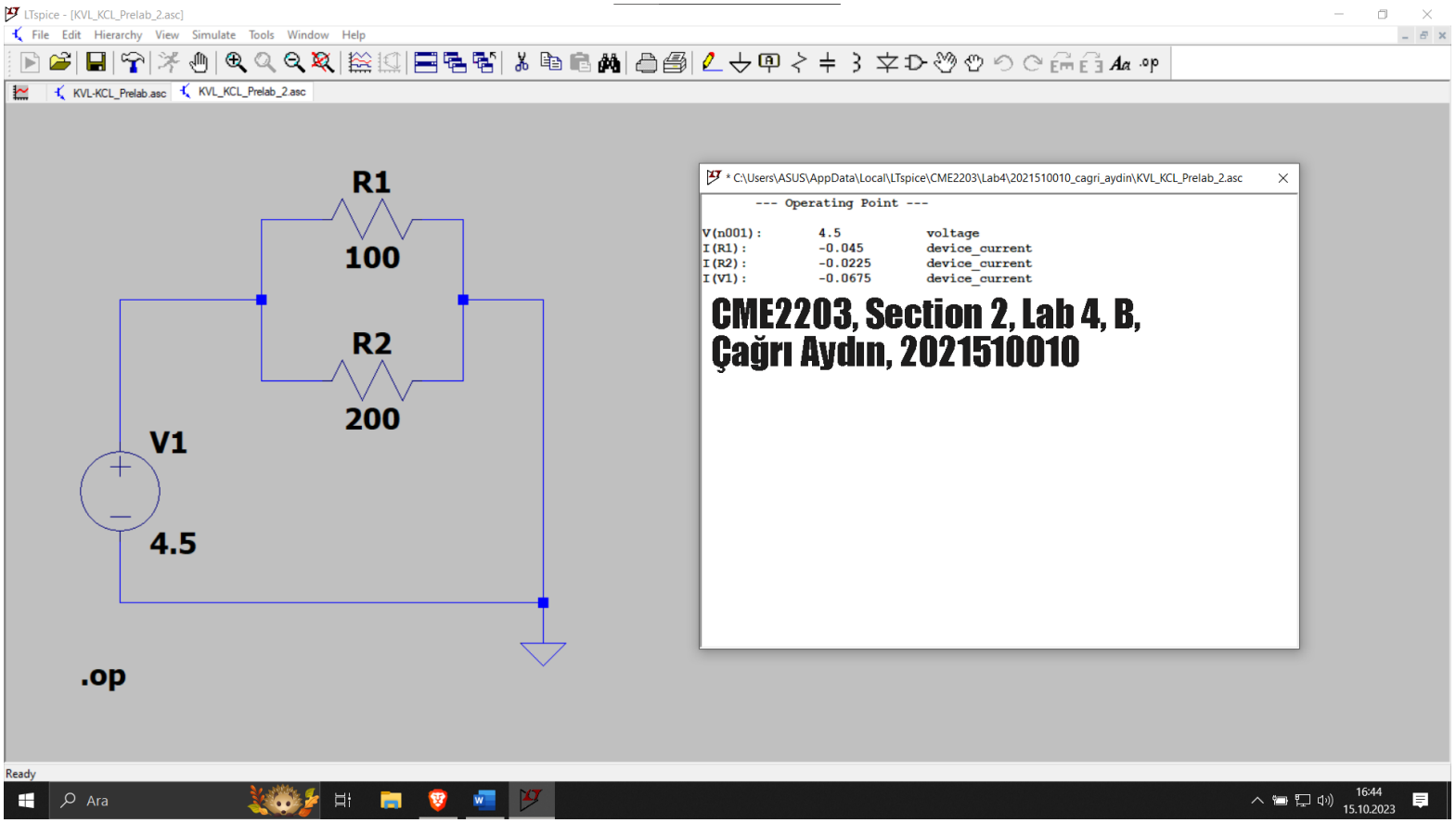
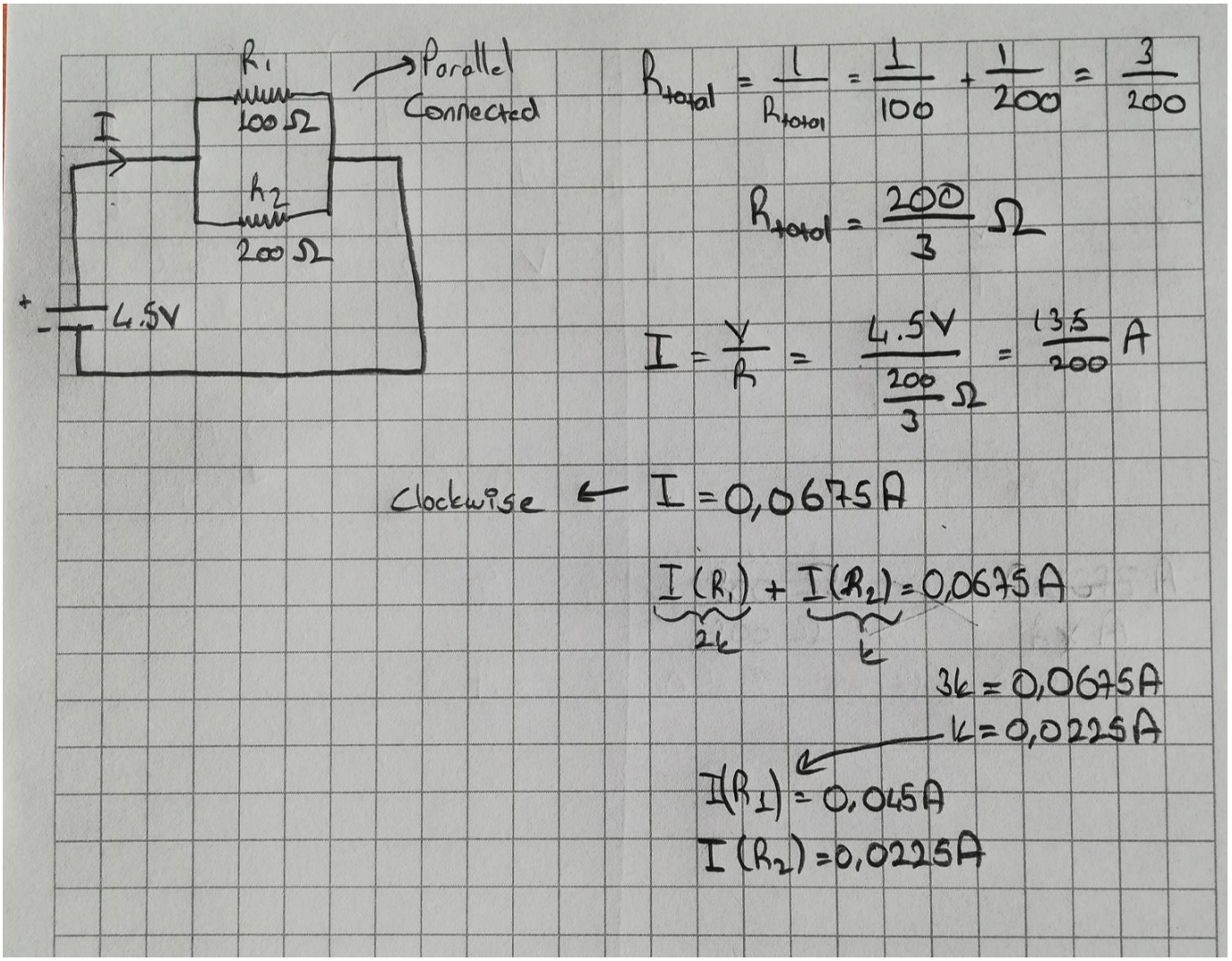

LTspice - [KVL-KCL_Prelab.asc]
File Edit Hierarchy View Simulate Tools Window Help
KVL-KCL_Prelab.asc
V1
4.5
R1
100
R2
200
R3
300
.op
* C:\Users\ASUS\AppData\Local\LTspice\CME2203\Lab4\2021510010_cagri_aydin\KVL-KCL_Prelab.asc
--- Operating Point ---
V(n002): 0.75 voltage
V(n003): 2.25 voltage
V(n001): 4.5 voltage
I(R1): 0.0075 device_current
I(R2): 0.0075 device_current
I(R3): 0.0075 device_current
I(V1): -0.0075 device_current
CME2203, Section 2, Lab 4, A,
Çağrı Aydın, 2021510010
Ready
Ara
16:44
15.10.2023


4,5V
R1
R2
R3
100Ω 200Ω 300Ω
Serial Connected
Clockwise
R_total = 100Ω + 200Ω + 300Ω
R_total = 600Ω
V = I . R ⇒ I = V/R = 4.5V/600Ω
I = 0,0075 A
R1 = 0,0075A . 100Ω = 0.75V
R2 = 0,0075A . 200Ω = 1.5V
R3 = 0,0075A . 300Ω = 2.25V


LTspice - [KVL_KCL_Prelab_2.asc]
File Edit Hierarchy View Simulate Tools Window Help
KVL-KCL_Prelab.asc
KVL_KCL_Prelab_2.asc
R1
100
R2
200
V1
4.5
.op
* C:\Users\ASUS\AppData\Local\LTspice\CME2203\Lab4\2021510010_cagri_aydin\KVL_KCL_Prelab_2.asc
--- Operating Point ---
V(n001): 4.5 voltage
I(R1): -0.045 device_current
I(R2): -0.0225 device_current
I(V1): -0.0675 device_current
CME2203, Section 2, Lab 4, B,
Çağrı Aydın, 2021510010
Ready
Ara
16:44
15.10.2023


R1
100 Ω
R2
200 Ω
I
4.5V
Parallel Connected
$R_{total} = \frac{1}{R_{total}} = \frac{1}{100} + \frac{1}{200} = \frac{3}{200}$
$R_{total} = \frac{200}{3}\ \Omega$
$I = \frac{V}{R} = \frac{4.5V}{\frac{200}{3}\Omega} = \frac{13.5}{200}\ A$
Clockwise ← I = 0,0675A
$I(R_1) + I(R_2) = 0,0675A$
2k
k
3k = 0,0675A
k = 0,0225A
$I(R_1) = 0,045A$
$I(R_2) = 0,0225A$