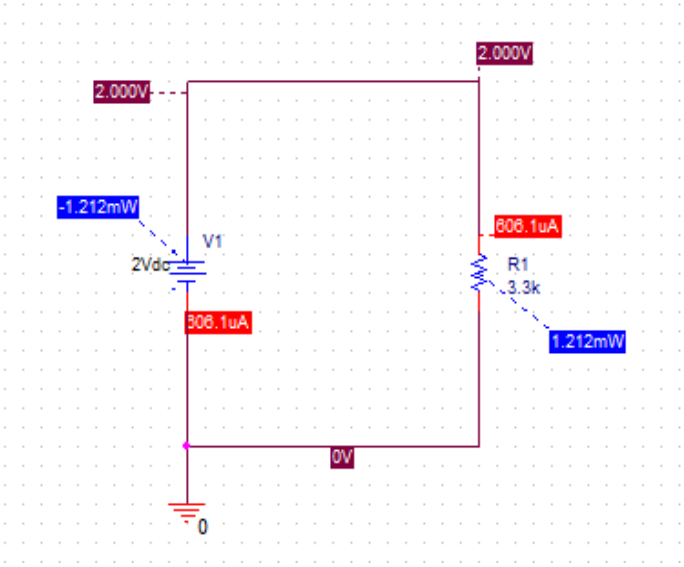
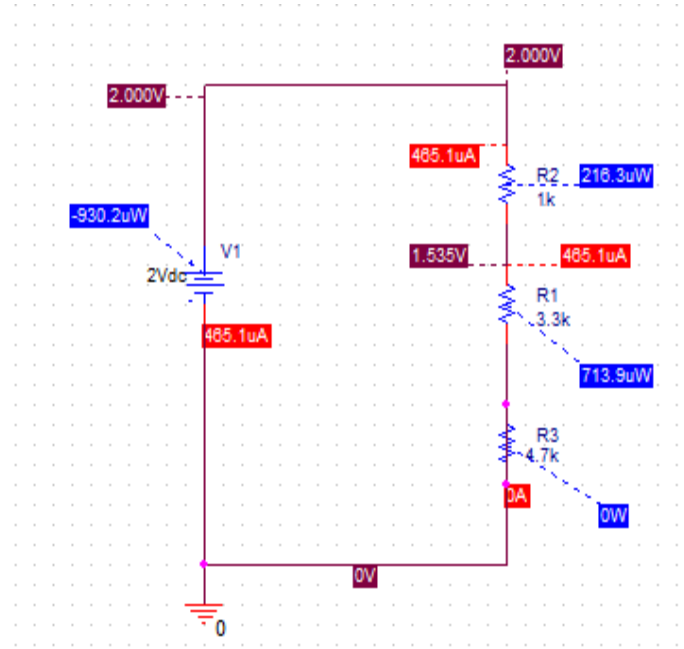
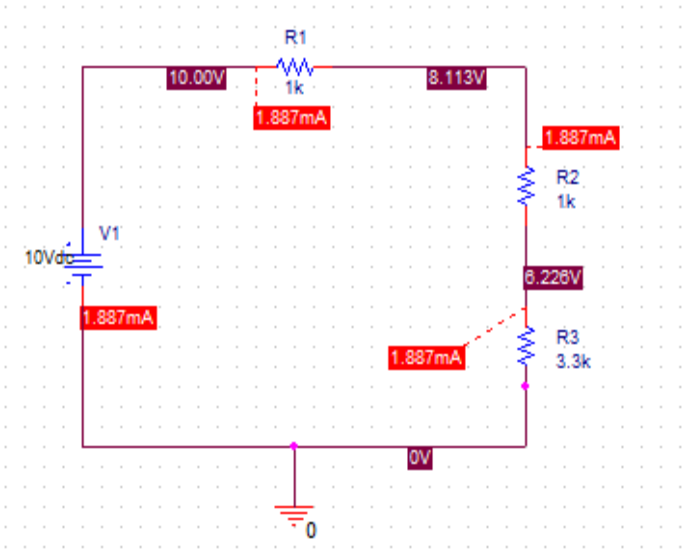
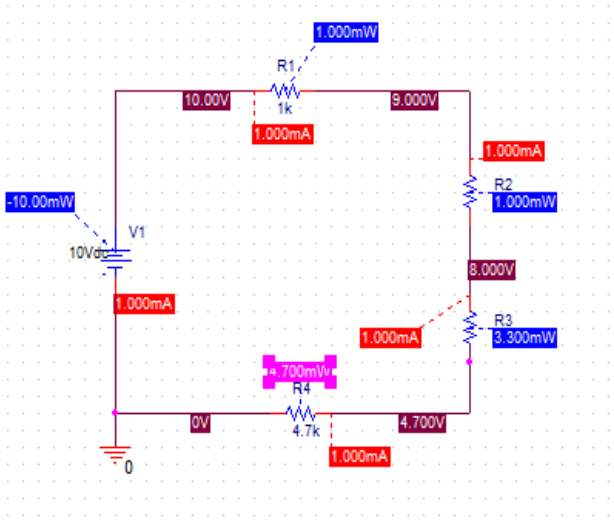


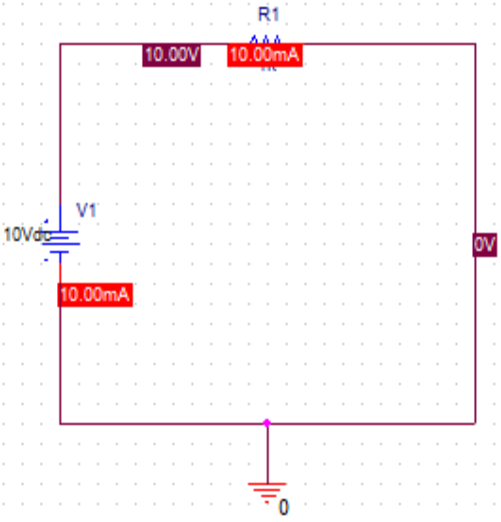
3.3k ohms	I	I (P-spice)	IR	IR (P-spice	P	P (p-spice)
2	0.61	0.606	2.01	2.00	1.22	1.212
4	1.25	1.23	4.13	4.233	5.16	5.17
6	1.85	1.859	6.1	6.115	11.29	11.3
8	2.97	2.97	9.8	9.91	29.1	30
10	3.11	3.170	10.10	10.1	31.9	31.88

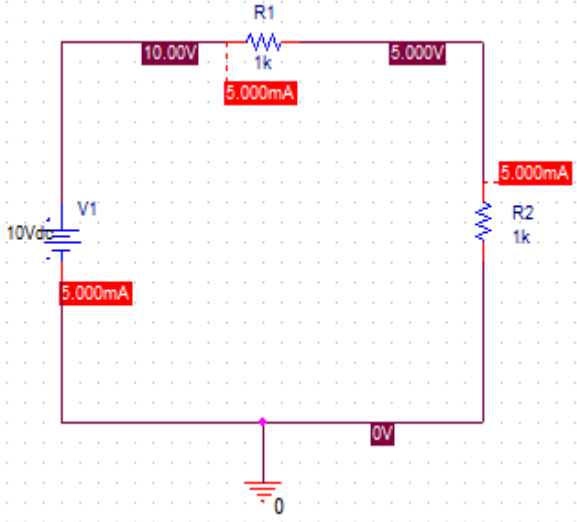


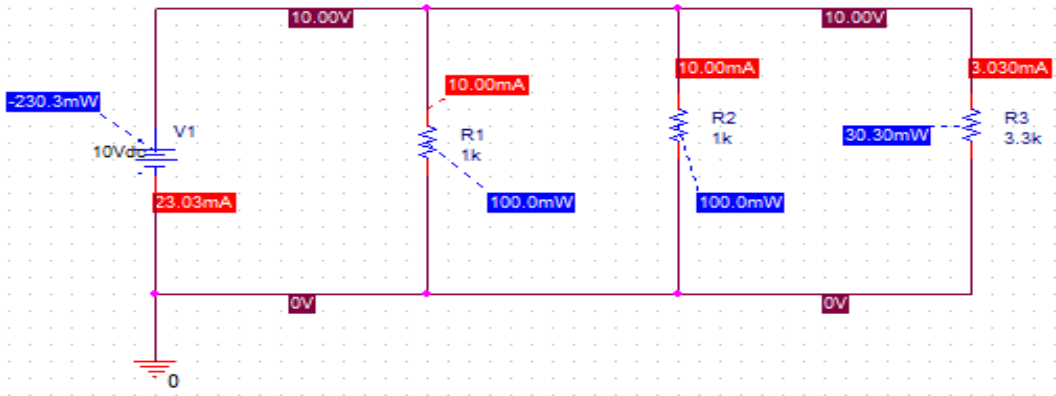
V_S	V_{R1}	V_{R1} (P-spice)	V_{R2}	V_{R2} (P-spice)	V_{R3}	V_{R3} (P-spice)
4.98	0.55	0.465	1.81	1.791	2.62	2.627

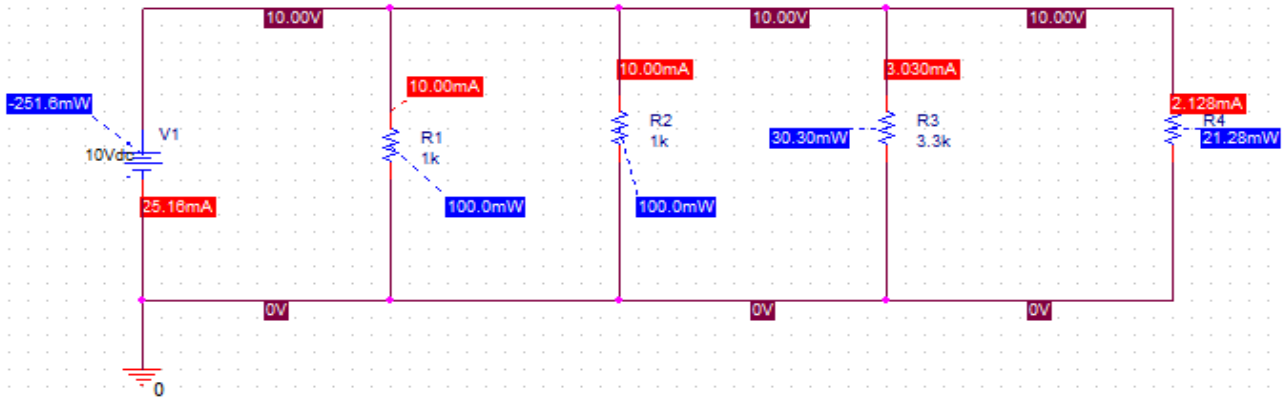

R1
1k
10.00V
8.113V
1.887mA
1.887mA
R2
1k
V1
10Vdc
6.226V
1.887mA
1.887mA
R3
3.3k
0V
0

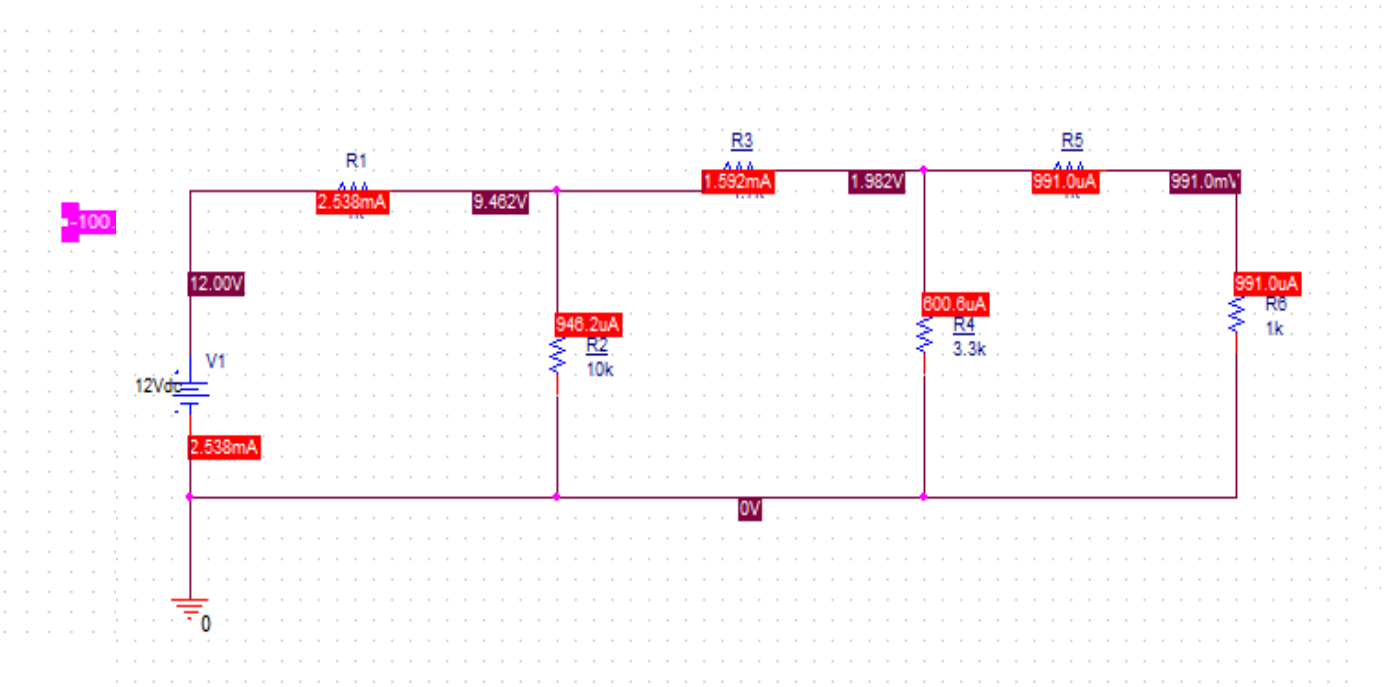

1.000mW
R1
1k
10.00V
9.000V
1.000mA
1.000mA
R2
1.000mW
-10.00mW
V1
10Vdc
8.000V
1.000mA
1.000mA
R3
3.300mW
4.700mW
R4
4.7k
0V
4.700V
1.000mA
0


R1
10.00V
10.00mA
V1
10Vdc
0V
10.00mA
0

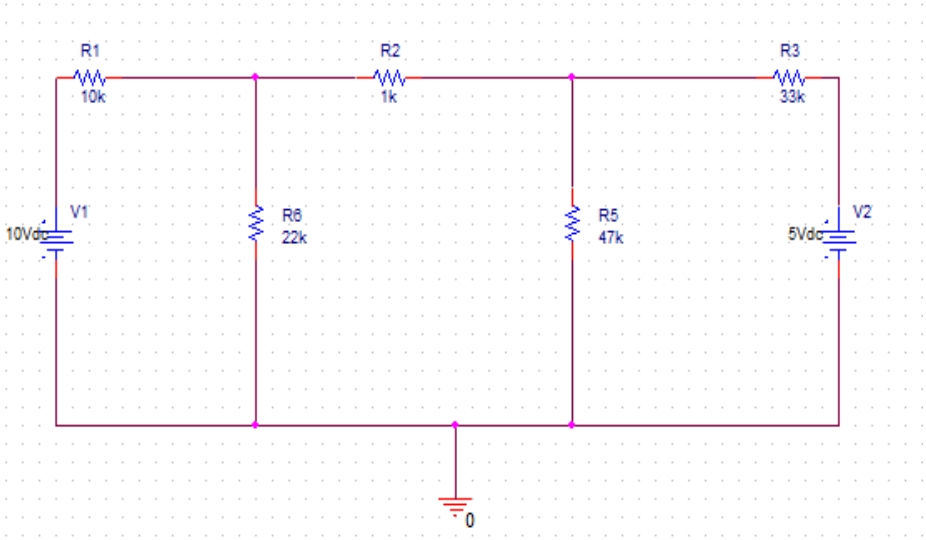

R1
1k
10.00V
5.000V
5.000mA
5.000mA
R2
1k
V1
10Vdc
5.000mA
0V
0


10.00V
10.00V
10.00mA
3.030mA
-230.3mW
V1
10Vdc
10.00mA
R1
1k
R2
1k
30.30mW
R3
3.3k
23.03mA
100.0mW
100.0mW
0V
0V
0

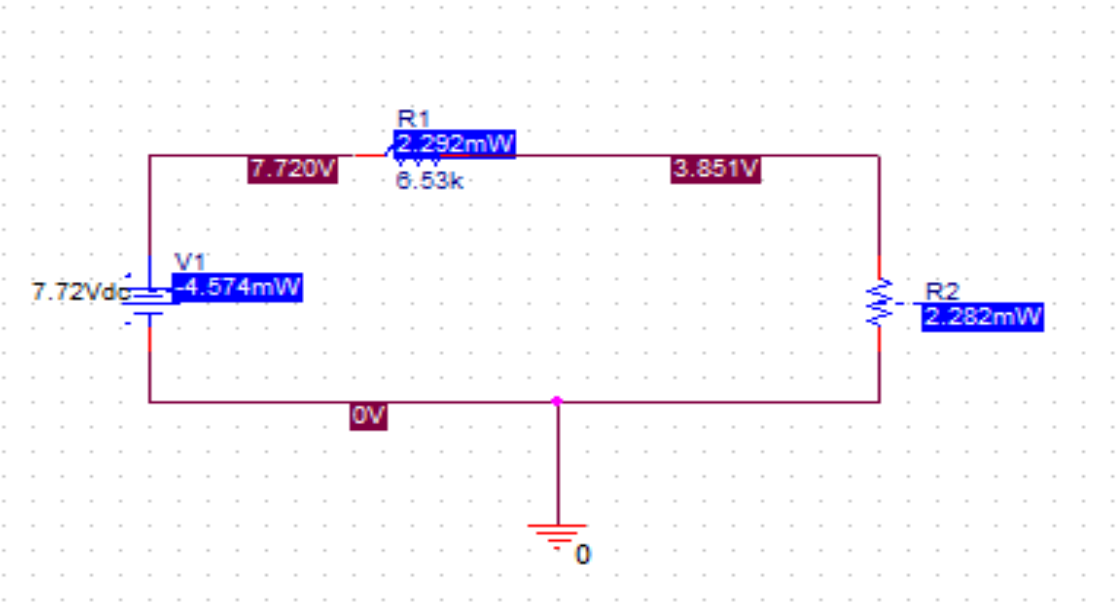

10.00V
10.00V
10.00V
10.00mA
3.030mA
-251.6mW
V1
10Vdc
10.00mA
R1
1k
R2
1k
30.30mW
R3
3.3k
2.128mA
R4
21.28mW
25.16mA
100.0mW
100.0mW
0V
0V
0V
0



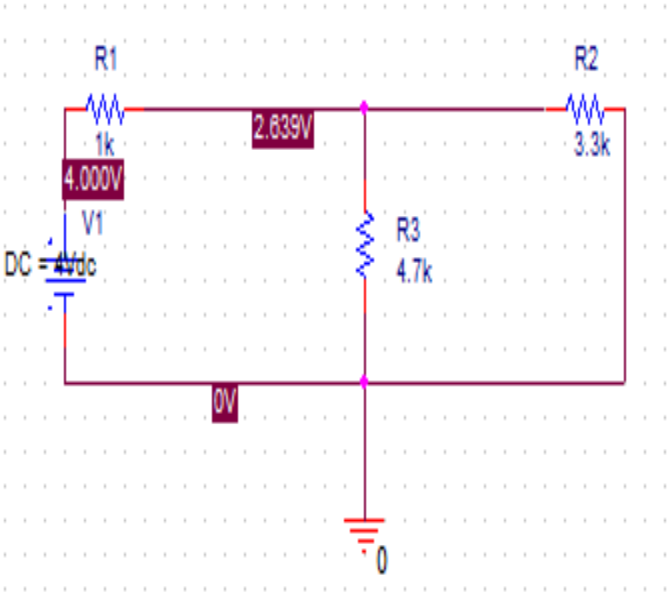
Component	Voltage	Voltage (pspice Simulation)	Current	Current (Pspice Simulation)
E	12.07	12	2.55	2.538
R_1	2.53	2.538	2.55	2.538
R_2	9.50	9.462	0.95	0.946
R_3	7.49	7.48	1.593	1.592
R_4	2.010	1.982	0.609	0.6
R_5	1.007	0.991	1.003	0.981
R_6	1.003	0.991	1.003	0.981



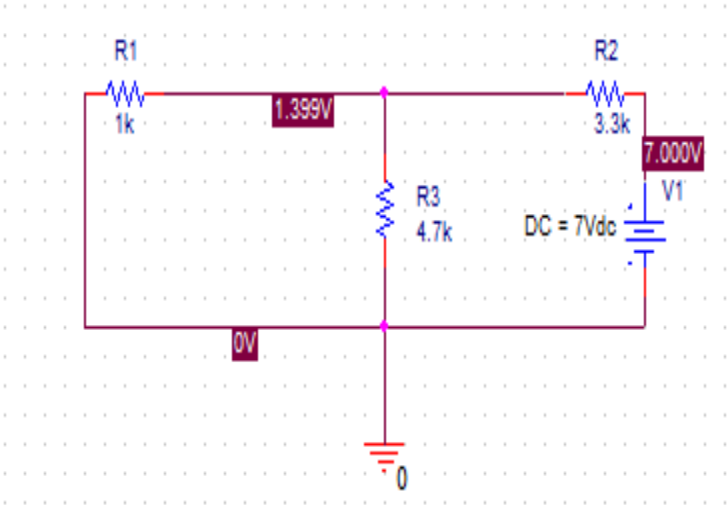
	V_{oc}(V)	I_{sc}(mA)	R_{TH}(K ohms)
Theory	**7.71**	**1.15**	**6.71**
Experiment	**7.72**	**1.153**	**6.53**
P-spice Simulation	**7.693**	**1.157**	**-**



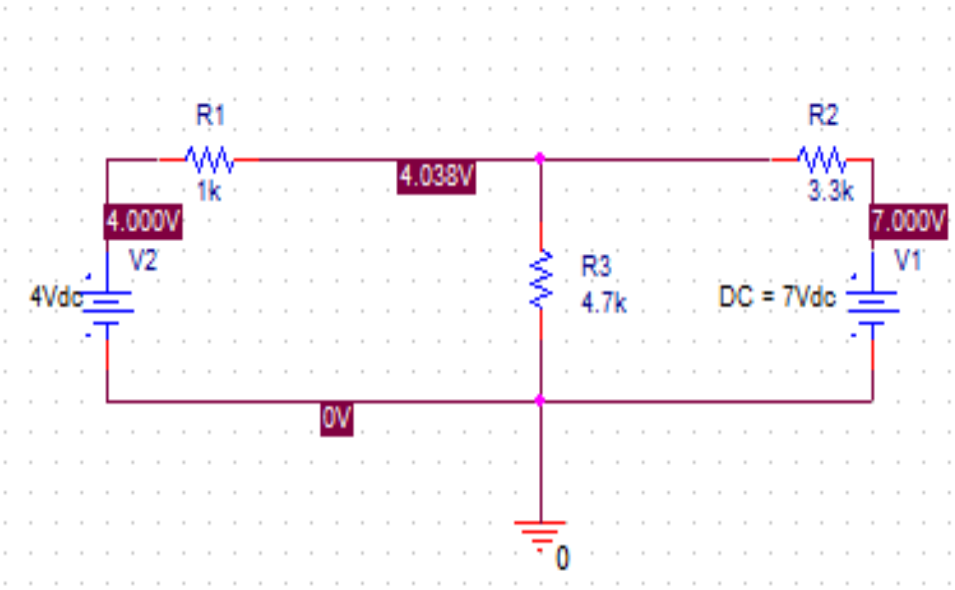
R_L	V_L (Experimental Values)	V_L (Pspice Simulation)	P_L(Experimental Values)	P_L(Pspice Simulation)
1	0.96	1.001	921.6	1001.3
2	1.77	1.79	1566	1571
4	2.93	2.931	2146	2146.9
5	3.33	3.333	2217	2216.3
6	3.65	3.647	2220.7	2221
6.5	3.82	3.851	2280.9	2282
7	3.96	3.961	2240.2	2274
8	4.20	4.201	2205	2231
9	4.43	4.429	2180.4	2189
10	4.62	4.615	2134.44	2153



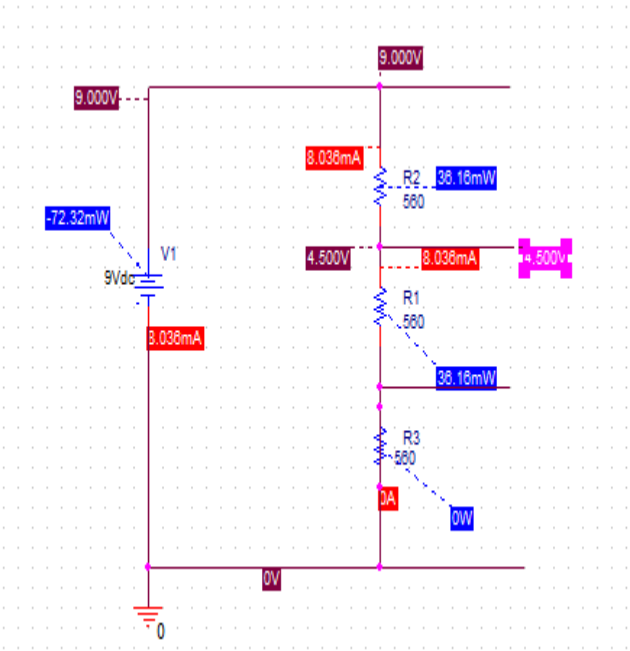
V1	V3’	Theoretical Value For V3’	Pspice Simulation Value for V3’
4	2.64	2.64	2.639
5	3.26	3.3	3.32
-6	-3.97	-3.96	-3.957

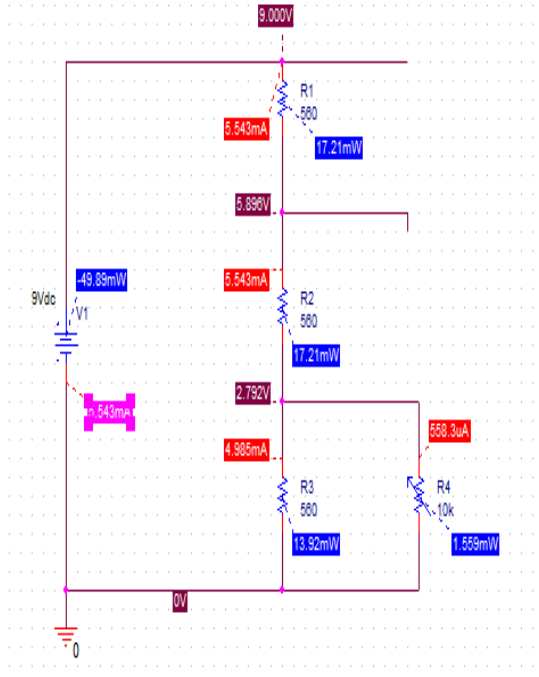


V2	V3’’	Theoretical Value for V3’’	Pspice Simulation for V3’’
7	1.4	1.4	1.399
8	1.61	1.6	1.619
-9	-1.81	-1.8	-1.81

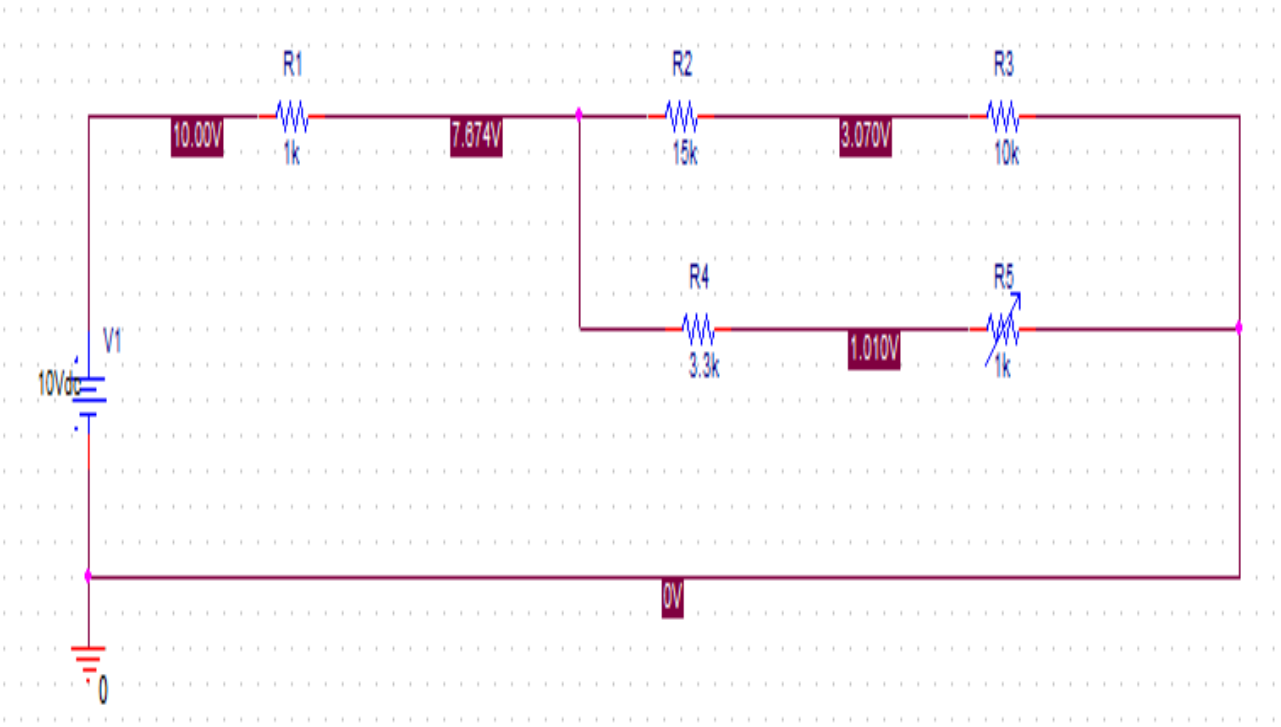


V1	V2	V3	Theoretical Value, V3	Pspice Simulation V3
4	7	4.04	4.04	4.038
4	8	4.23	4.24	4.22
4	-9	0.8	0.84	0.812
5	7	4.68	4.7	4.631
5	8	4.88	4.9	4.915
5	-9	1.43	1.5	1.477
-6	7	-2.57	-2.57	-2.573
-6	8	-2.38	-2.36	-2.374
-6	-9	-5.81	-5.8	-5.83

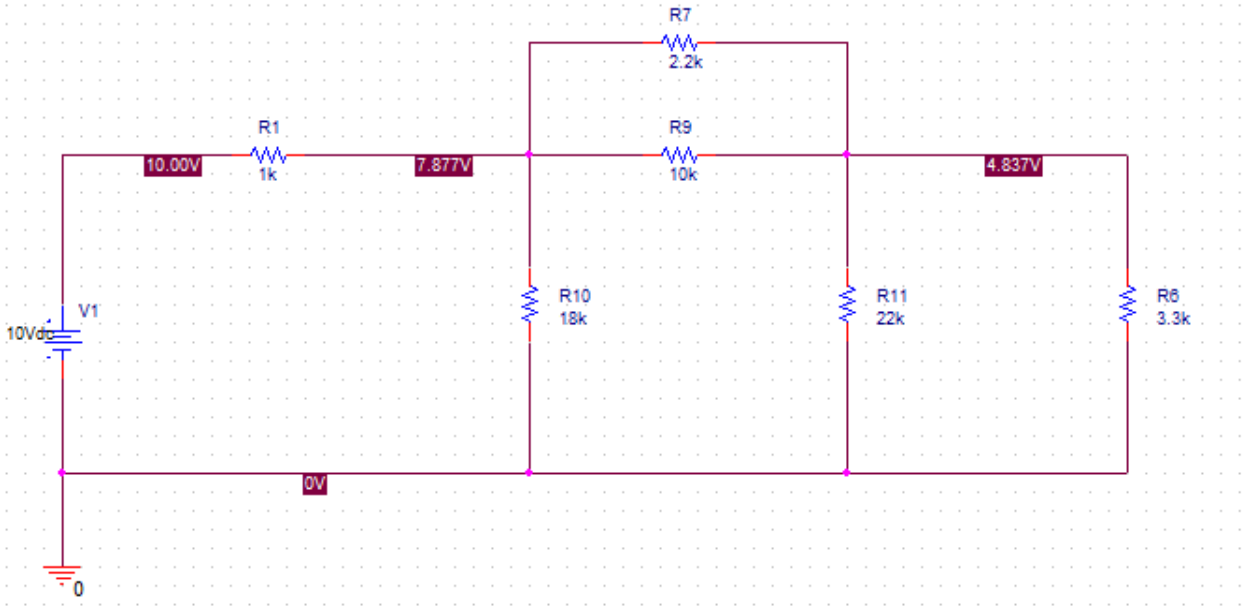


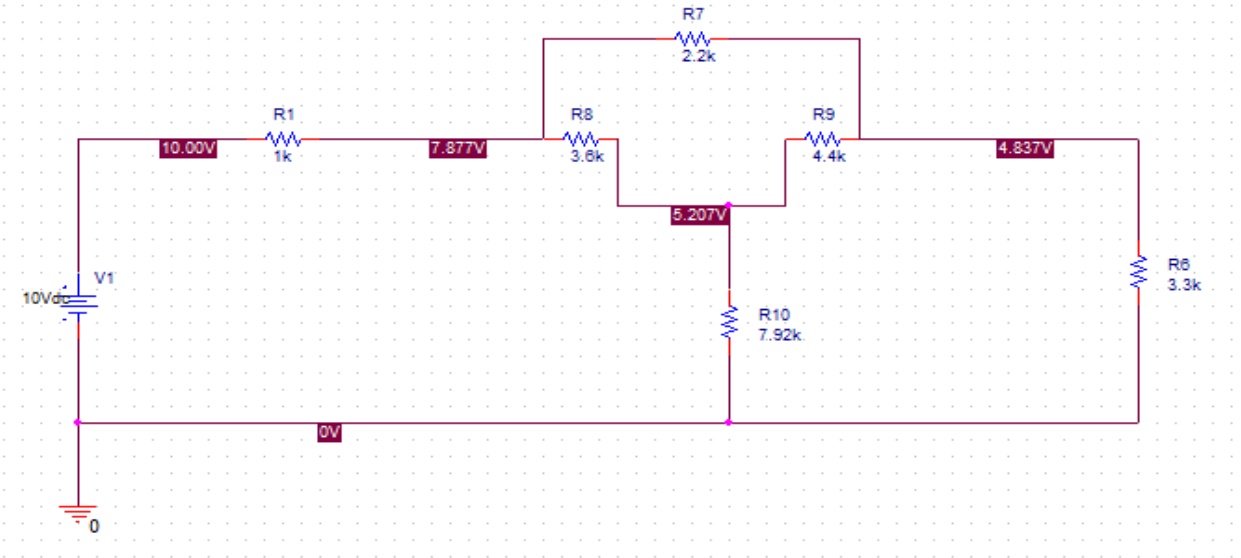


	Circuit 1	Circuit 1 (R=1k)	Circuit 1 (R=4k)	Circuit 1 (R=7k)	Circuit 1 (R=10k)
RT(k)	1.65	1.45	1.58	1.58	1.62
E	8.92	8.92	8.92	8.92	8.92
I	5.9	6.15	5.69	5.69	5.50
V_{R1}(V)	2.98	3.38	3.10	3.10	3.03
V_{R1}(V) [Pspice]	2.937	3.31	3.1	3.1	3.05
V_{R2}(V)	2.97	3.38	3.10	3.10	3.02
V_{R2}(V) [Pspice]	2.97	3.37	3.131	3.131	3.002
V_{R3}(V)	2.98	2.17	2.73	2.73	2.87
V_{R3}(V) [Pspice]	2.97	2.171	2.773	2.741	2.88
V_{R4}(V)	-	2.17	2.73	2.73	2.87
V_{R4}(V) [Pspice]		2.181	2.71	2.71	2.881
I_{R1}(mA)	5.40	6.15	5.64	5.64	5.50
I_{R1}(mA) [Pspice]	5.4	6.11	5.611	5.611	5.53
I_{R2}(mA)	5.40	6.15	5.64	5.64	5.50
I_{R2}(mA) [Pspice]	5.4	6.153	5.644	5.644	5.52
I_{R3}(mA)	5.40	3.95	4.96	4.96	5.218
I_{R3}(mA) [Pspice]	4.41	3.953	4.901	4.901	5.255
I_{R4}(mA)	-	2.21	0.684	0.39	0.287
I_{R4}(mA) [Pspice]		2.25	0.59	0.41	0.285



R2(K ohm)	V	V (Pspice Simulation)
1	1.28	1.278
2	0.11	0.109
3	-0.74	-0.78
4	-1.36	-1.371
5	-1.85	-1.85
6	-2.24	-2.23
7	-2.53	-2.55
8	-2.83	-2.89
9	-3.04	-3.003
10	-3.23	-3.212
2.1	0	0


R7
2.2k
R1
1k
R9
10k
10.00V
7.877V
4.837V
R10
18k
R11
22k
R6
3.3k
V1
10Vdc
0V
0


R7
2.2k
R1
1k
R8
3.6k
R9
4.4k
10.00V
7.877V
4.837V
5.207V
R6
3.3k
V1
10Vdc
R10
7.92k
0V
0

	Circuit-1	Circuit-2	Circuit-3	Circuit-4
R_T(K ohms)	**0.98**	**1.96**	**4.95**	**9.64**
E (V)	**10.12**	**5.05**	**2.002**	**1.027**
I (mA)	**9.92**	**9.91**	**9.92**	**9.9**
V_{R1}	**9.92**	**4.94**	**1.97**	**1.01**
V_{R1} (P-spice)	**10**	**5**	**1.887**	**1**
V_{R2}	**-**	**4.97**	**1.97**	**1.01**
V_{R2} (P-spice)	**-**	**5**	**1.887**	**1**
V_{R3}	**-**	**-**	**5.97**	**3.07**
V_{R3} (P-spice)	**-**	**-**	**6.226**	**3.03**
V_{R4}	**-**	**-**	**-**	**4.81**
V_{R4} (P-spice)	**-**	**-**	**-**	**4.7**

	Circuit-1	Circuit-2	Circuit-3	Circuit-4
R_T(K ohms)	0.986	0.495	0.429	0.393
E (V)	4.97	4.97	4.97	4.97
V_{drop}	4.97	4.97	4.97	4.97
Is	4.99	9.84	11.64	12.65
I_{R1}	4.99	5.01	5	4.98
I_{R1} (P-spice)	4.99	5.012	5.001	4.976
I_{R2}	-	4.98	4.983	4.96
I_{R2} (P-spice)	-	4.99	4.988	4.957
I_{R3}	-	-	1.66	1.66
I_{R3} (P-spice)	-	-	1.667	1.667
I_{R4}	-	-	-	1.07
I_{R4} (P-spice)	-	-	-	1.061