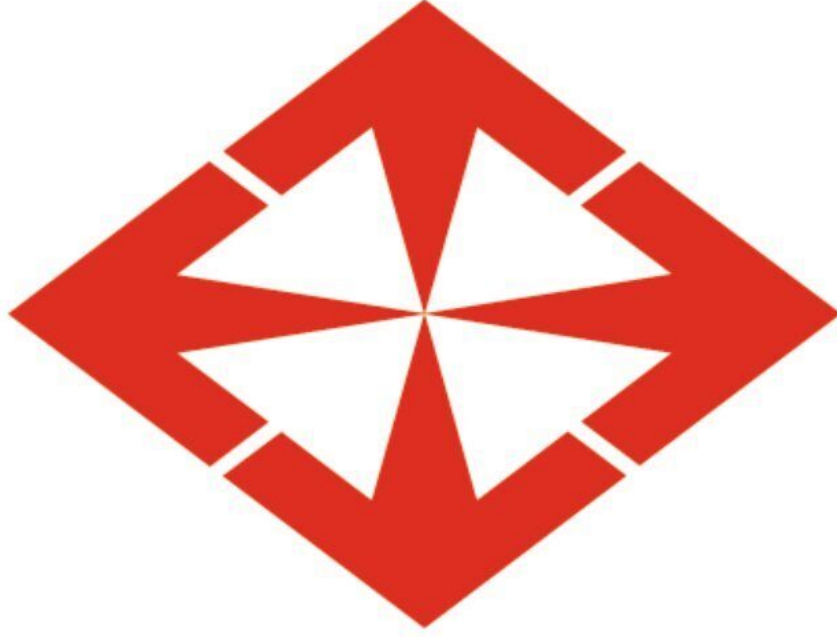




BAŞKENT ÜNİVERSİTESİ

EEM 311 LABARATUARI

DENEY- 8

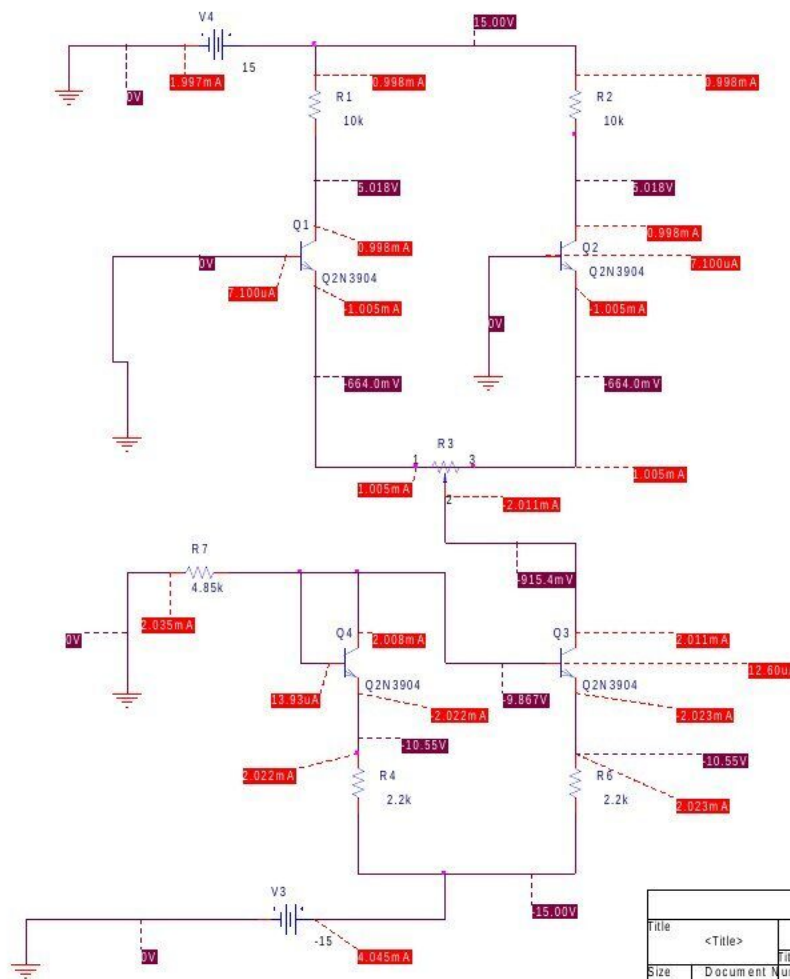
03.12.2012



BAŞKENT UNIVERSITY
DEPARTMENT OF ELECTRICAL AND ELECTRONICS
ENGINEERING
EEM 311 ELECTRONICS II
EXPERIMENT 8
INTRODUCTION TO OPAMPS

EXPERIMENTAL WORK:

1.)

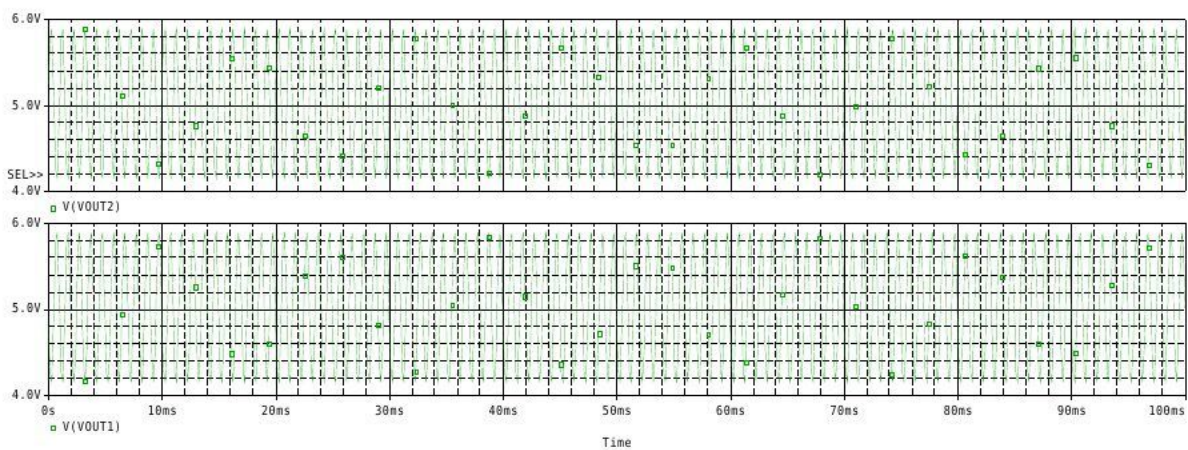
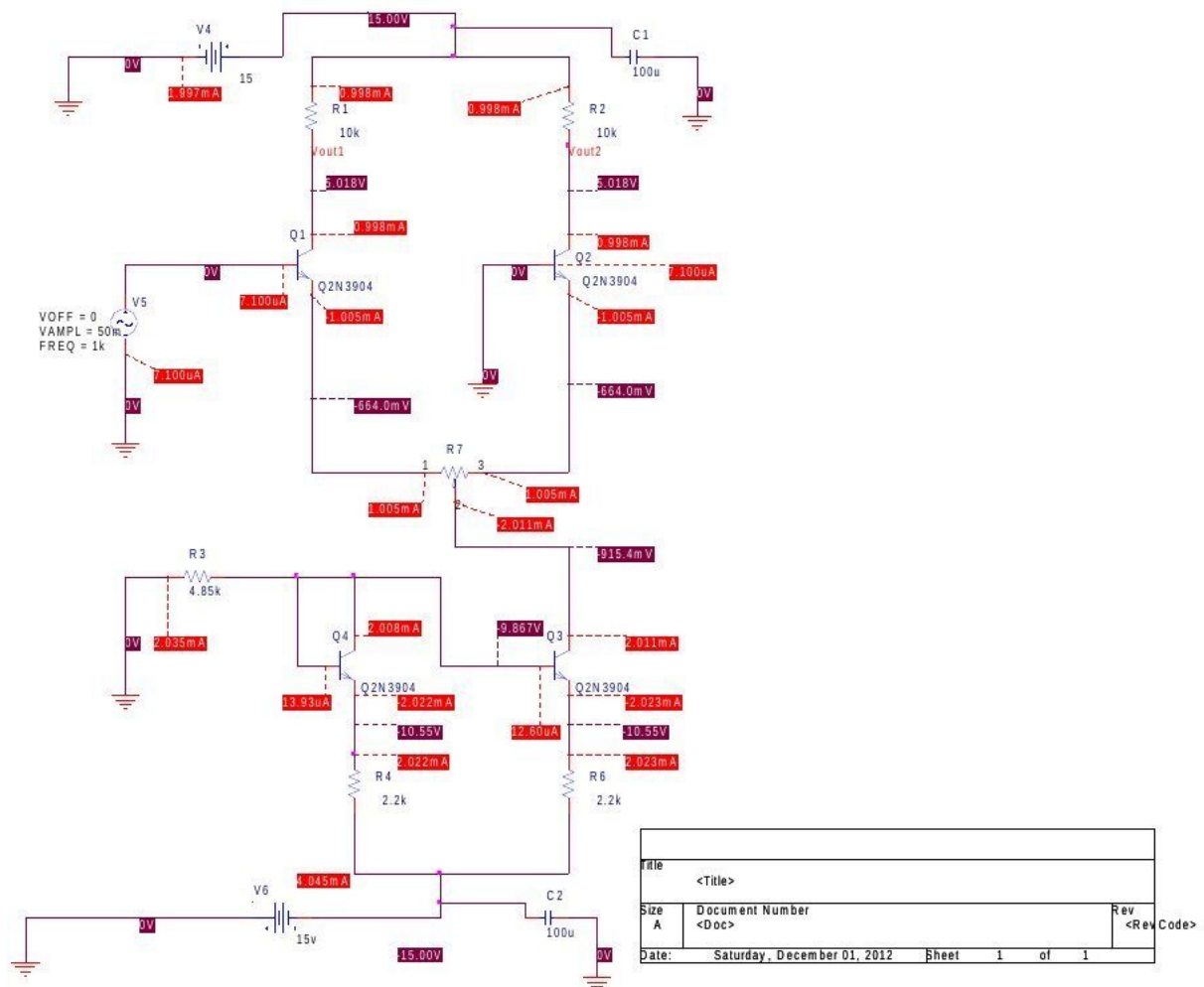


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Date:	Saturday, December 01, 2012	Sheet	1 of 1
Rev		Rev	
Code		Code	
Date:		Date:	
Saturday, December 01, 2012		Sheet	
		1 of 1	

$IC_{QA} = 2,008 \text{ mA}$
 $V_{CE1} = 5,682 \text{ V}$
 $IC_{Q1} = 0,998 \text{ mA}$
 $V_{C1} = 5,018 \text{ V}$

$IC_{QB} = 2,011 \text{ mA}$
 $V_{CE2} = 5,682 \text{ V}$
 $IC_{Q2} = 0,998 \text{ mA}$
 $V_{C2} = 5,018 \text{ V}$

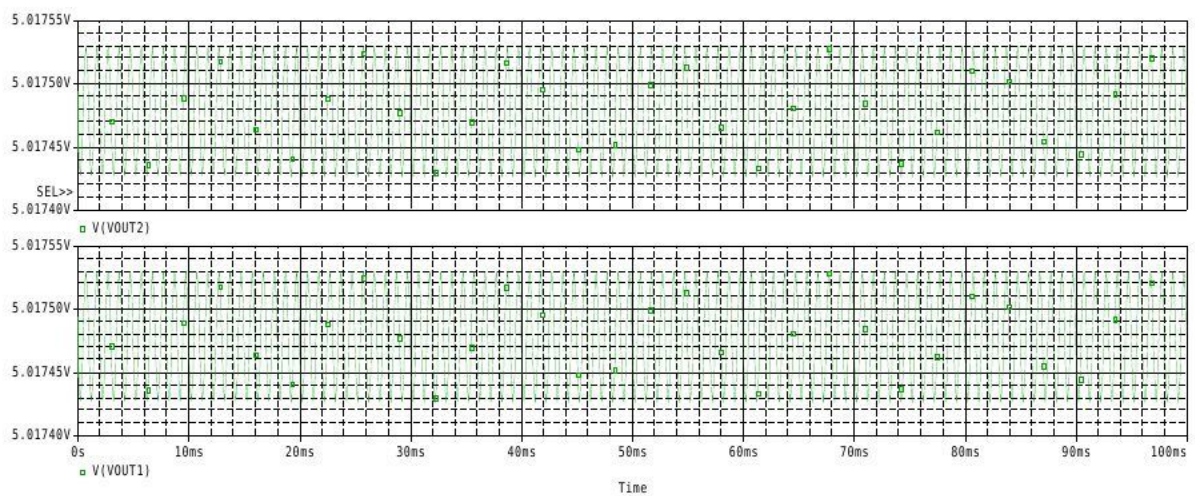
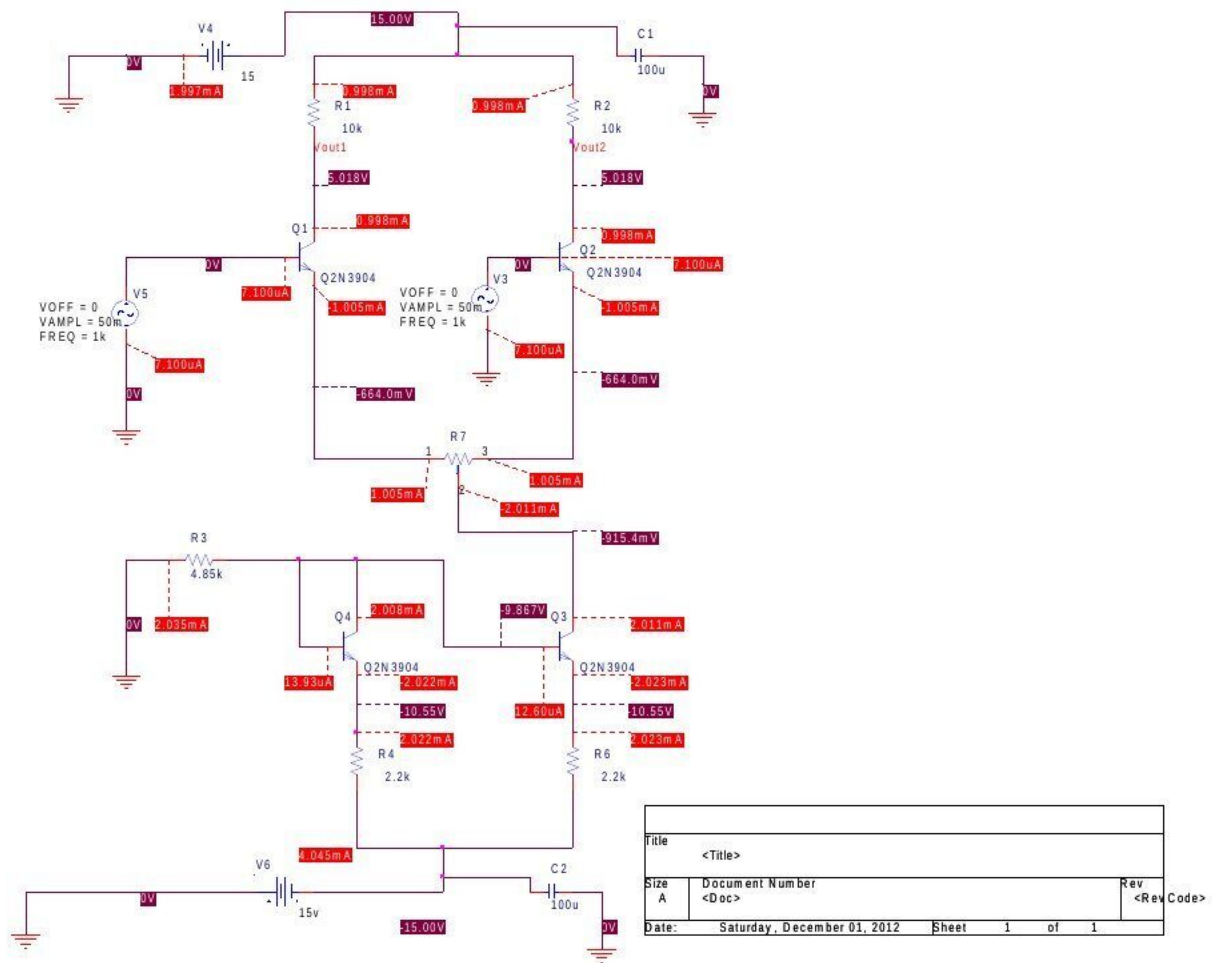
2.)



$v_{out1} = 6 \text{ V}$
 $v_{out2} = 6 \text{ V}$
 $A_{vdm-se1} = 120$

$A_{vdm-se2} = 120$

3.)



$v_{out1} = 5,0175 \text{ V}$
 $v_{out2} = 5,0175 \text{ V}$
 $A_{vdm-se1} = 50.175$

$A_{vdm-se2} = 50,175$

4.) For Laboratory 2

$$v_{out1} - v_{out2} = 0 \text{ V}$$

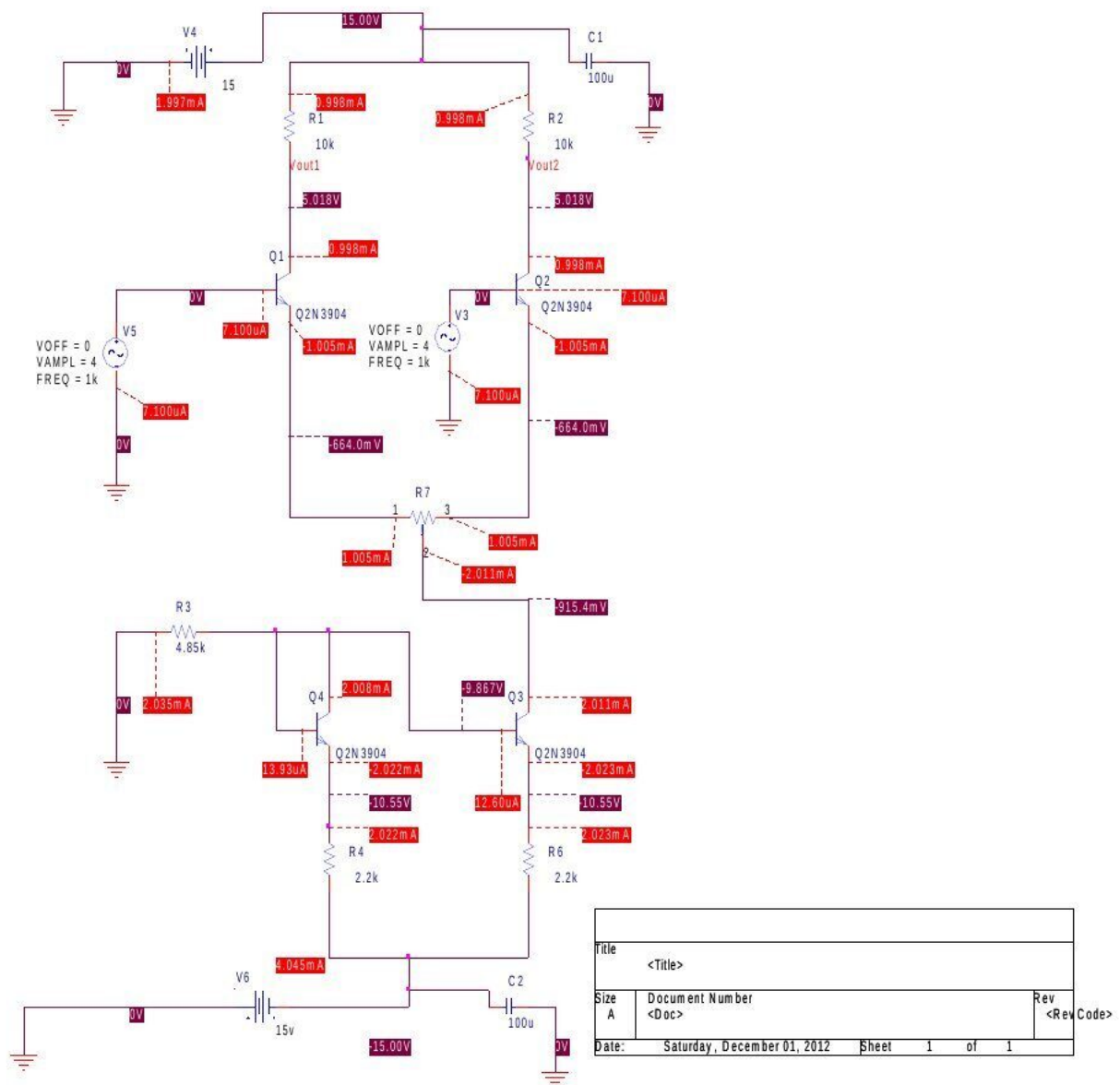
$$A_{vdm-diff} = 0$$

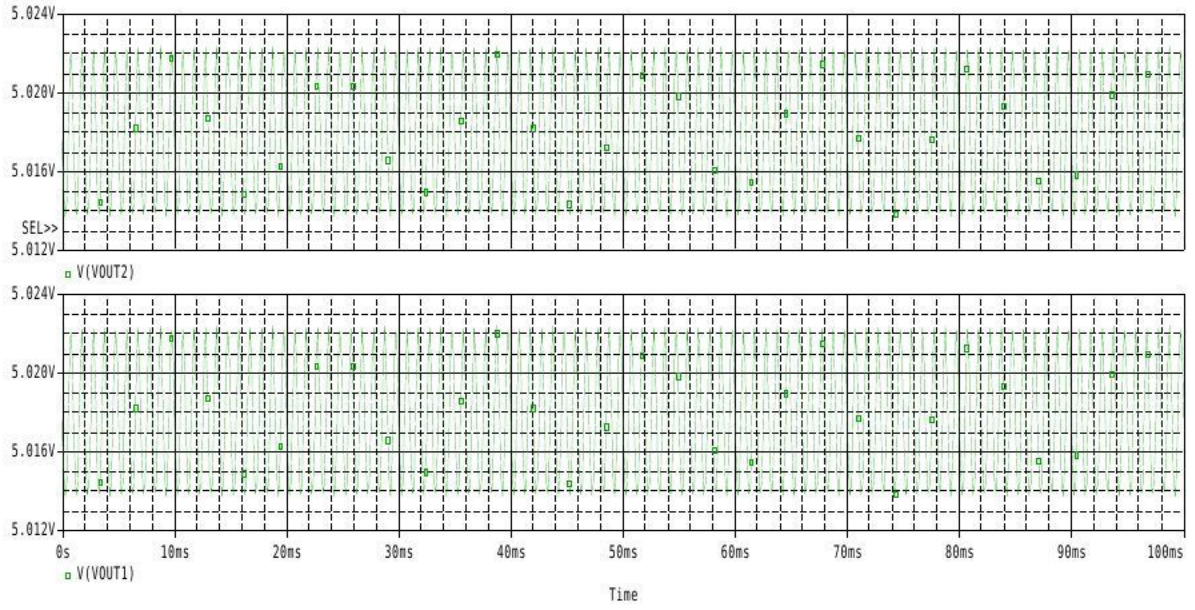
4.) For Laboratory 1

$$v_{out1} - v_{out2} = 0 \text{ V}$$

$$A_{vdm-diff} = 0$$

5.)





$$v_{out1} = 5,024 \text{ V}$$

$$v_{out2} = 5,024 \text{ V}$$

$$A_{vcm-se1} = 1,256$$

$$A_{vcm-se2} = 1,256$$

6.)

$$CMRR = \infty$$

7 - 8.) Ön çalışma ve deneyi aynı devre üzerinden Psipice da kurup değer aldığım için sonuçlarda bir farklılık göremedim. Deneyimde sonuç alabilseydim muhtemelen aynı tip elemanlar üretilemeyeceği için sonuçlarım, teorik olarak hesaplanan değerlerden farklı çıkacaktır.