BIRZEIT UNIVERSITY

Faculty of Engineering and Technology

Electrical and Computer Engineering Department

Electronics LAB (ENEE3102)

Pre-LAB of Experiment #7

Power Amplifiers

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Date:

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Section: #1

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I. THE CLASSES OF POWER AMPLIFIER.

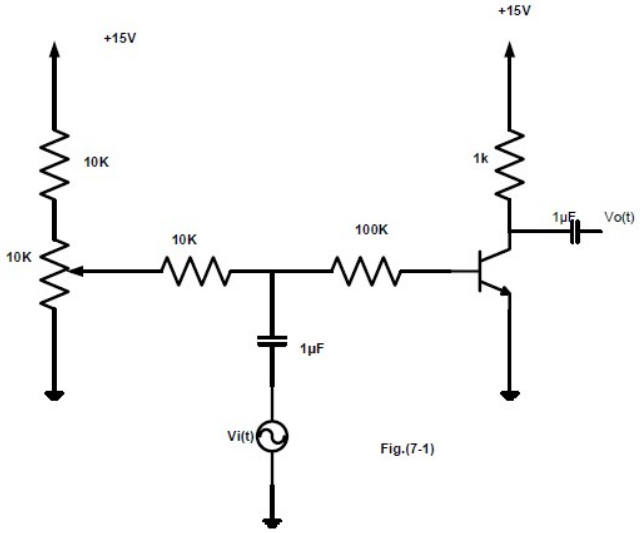


Figure (7-1)

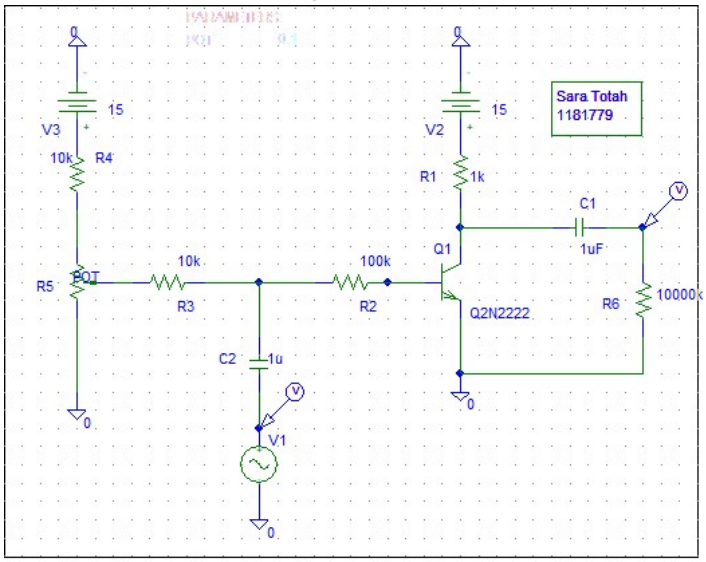
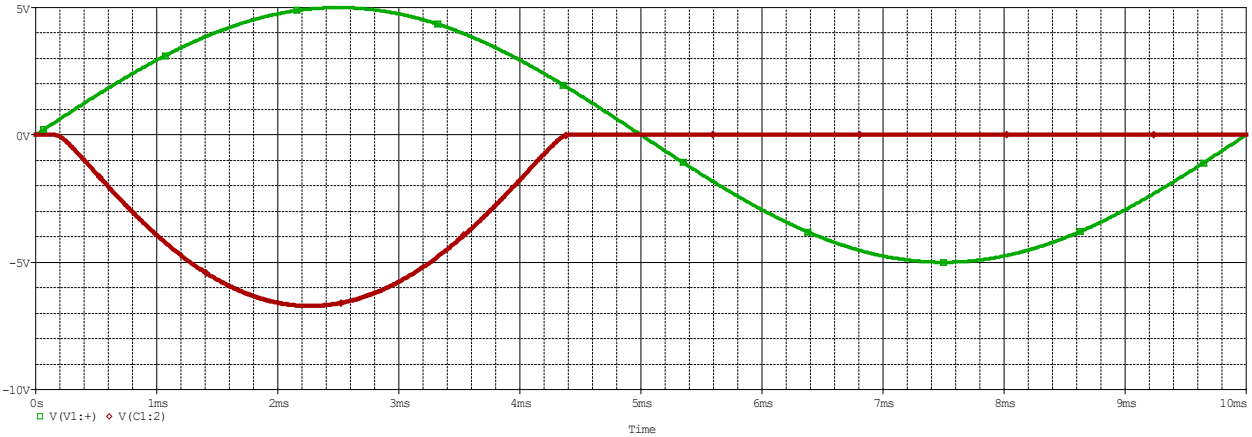


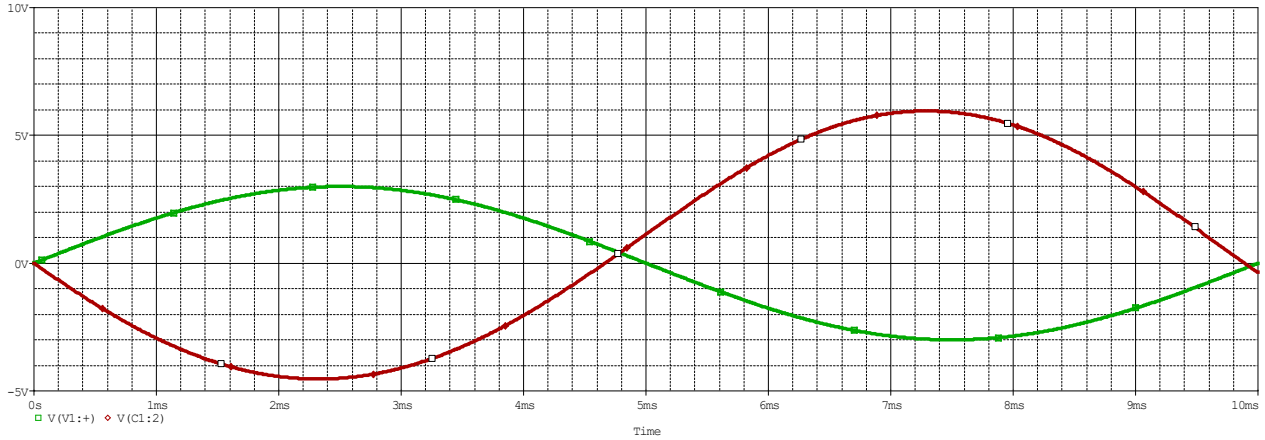
Figure (7-1): PSPICE simulation

1. For V_{in} = 10volts P-P
   - Potentiometer set = 1
   - This is a class B power amplifier.



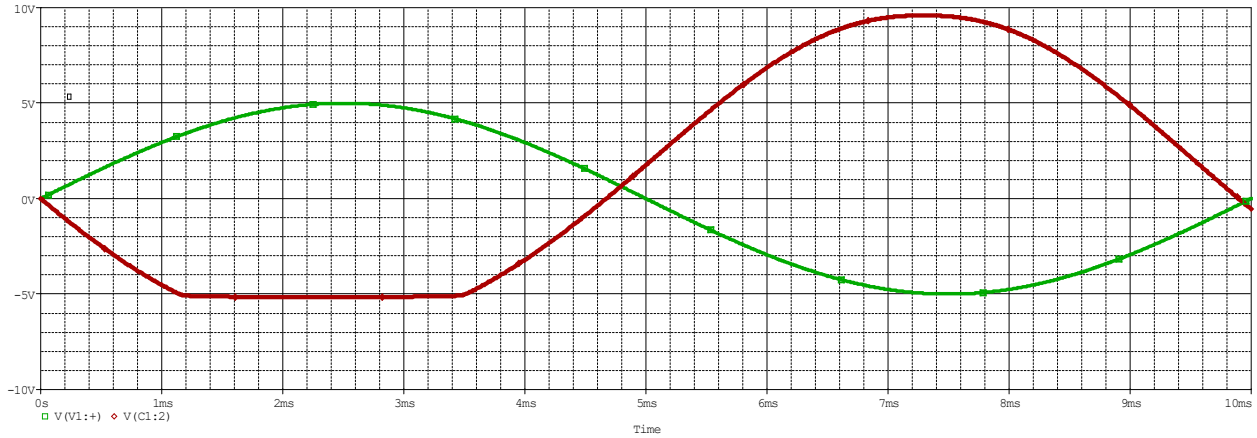
V_{in} & V_{out} waveforms

2. For V_{in} = 6volts $_{P-P}$
   - Potentiometer set = 0.3
   - This is a class B power amplifier.



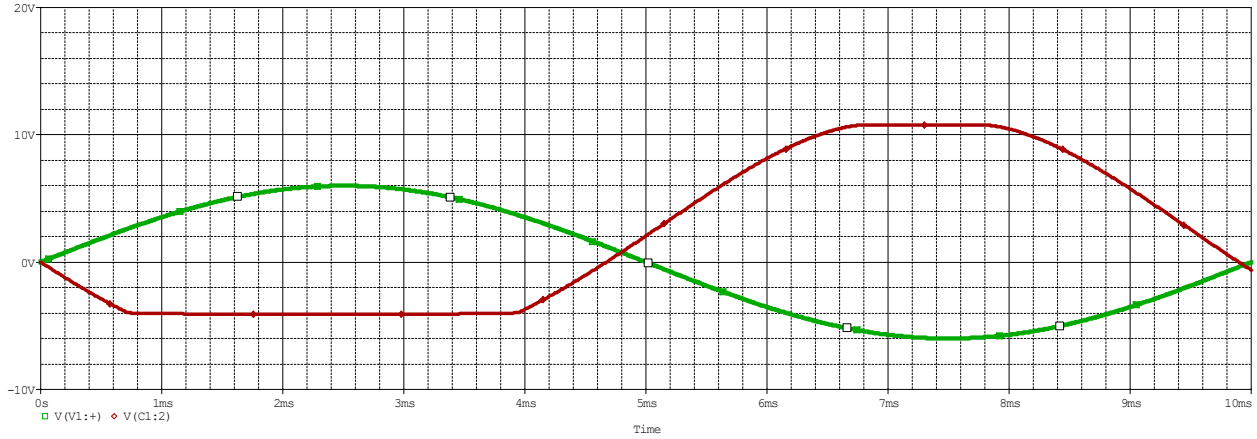
V_{in} & V_{out} waveforms

3. For V_{in} = 10volts $_{P-P}$
   - Potentiometer set = 1
   - This is a class AB power amplifier.



V_{in} & V_{out} waveforms

4. For V_{in} = 12volts $_{P-P}$
   - Potentiometer set = 1
   - This is a class AB power amplifier.



V_{in} & V_{out} waveforms

II. PUSH-PULL AMPLIFIER.

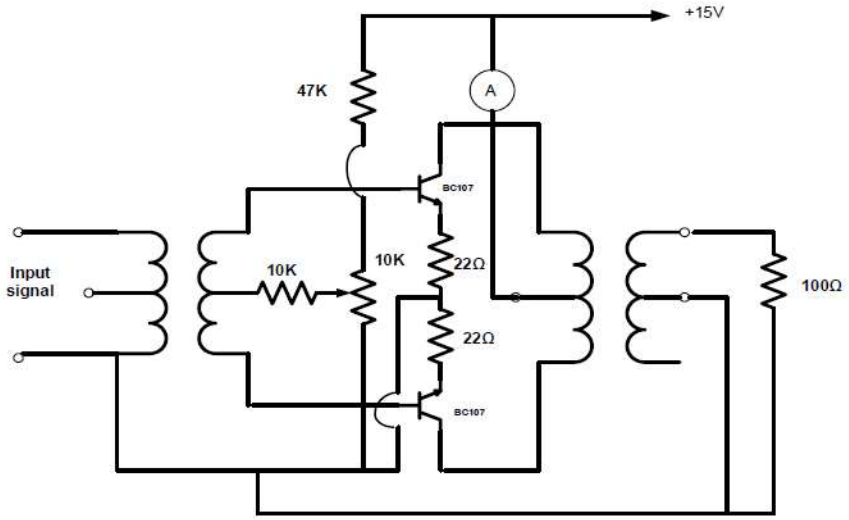


Figure (7-2)

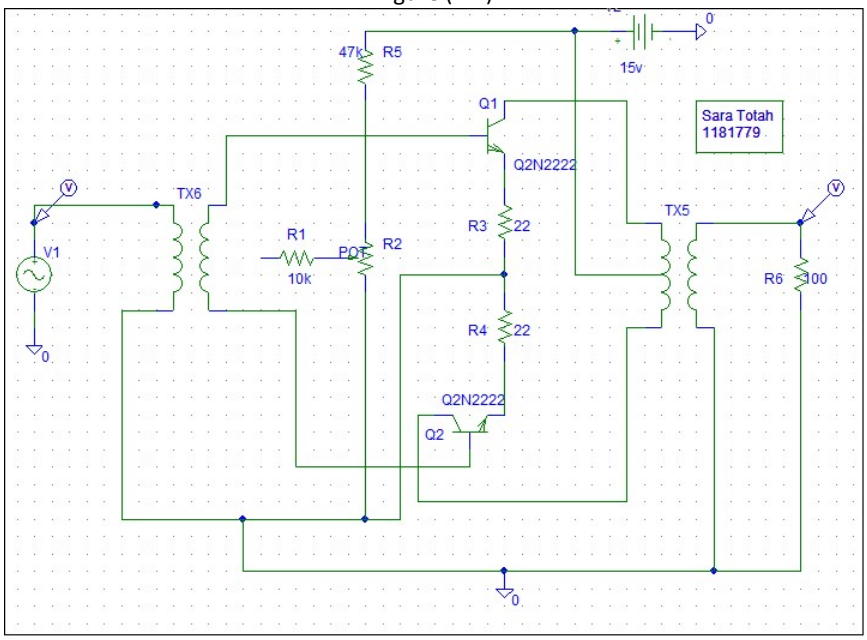


Figure (7-2): PSPICE simulation

III. COMPLEMENTARY PUSH-PULL AMPLIFIER.

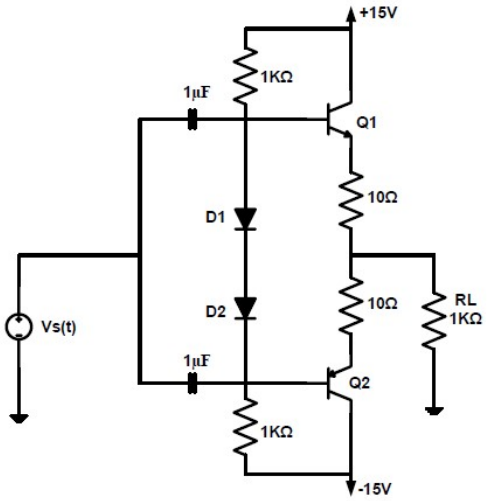


Figure (7-3)

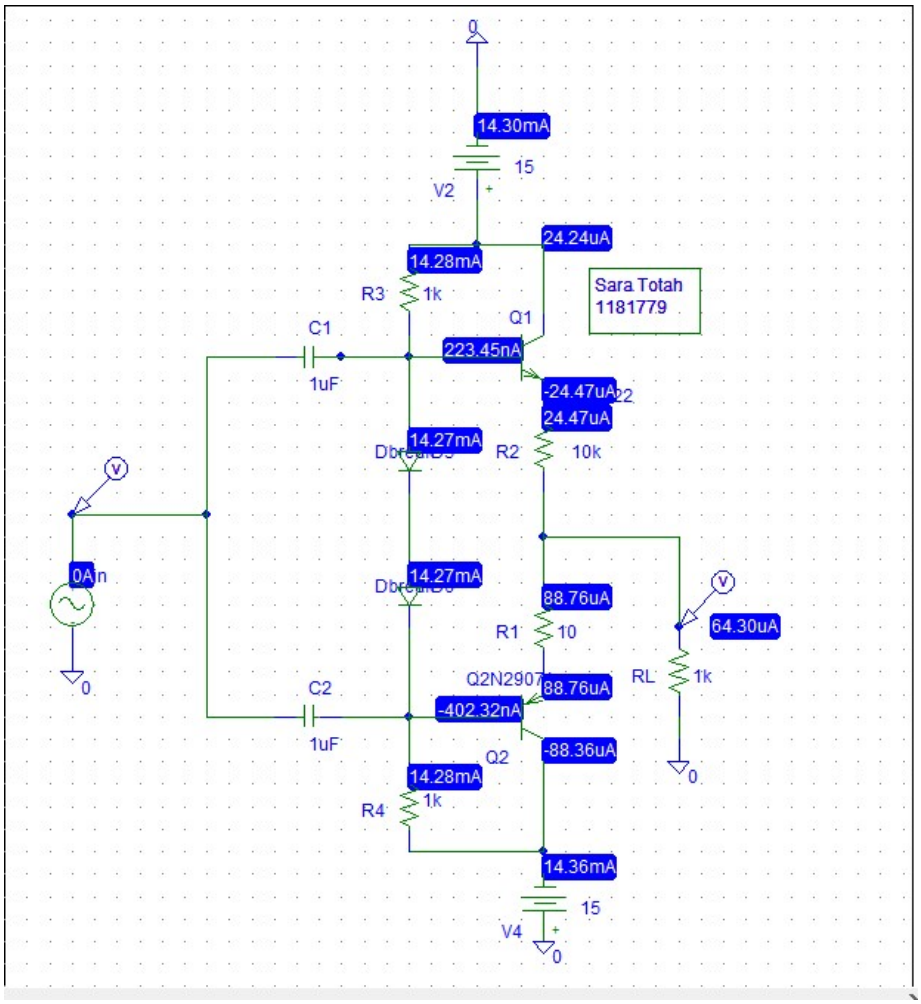


Figure (7-3): PSPICE simulation

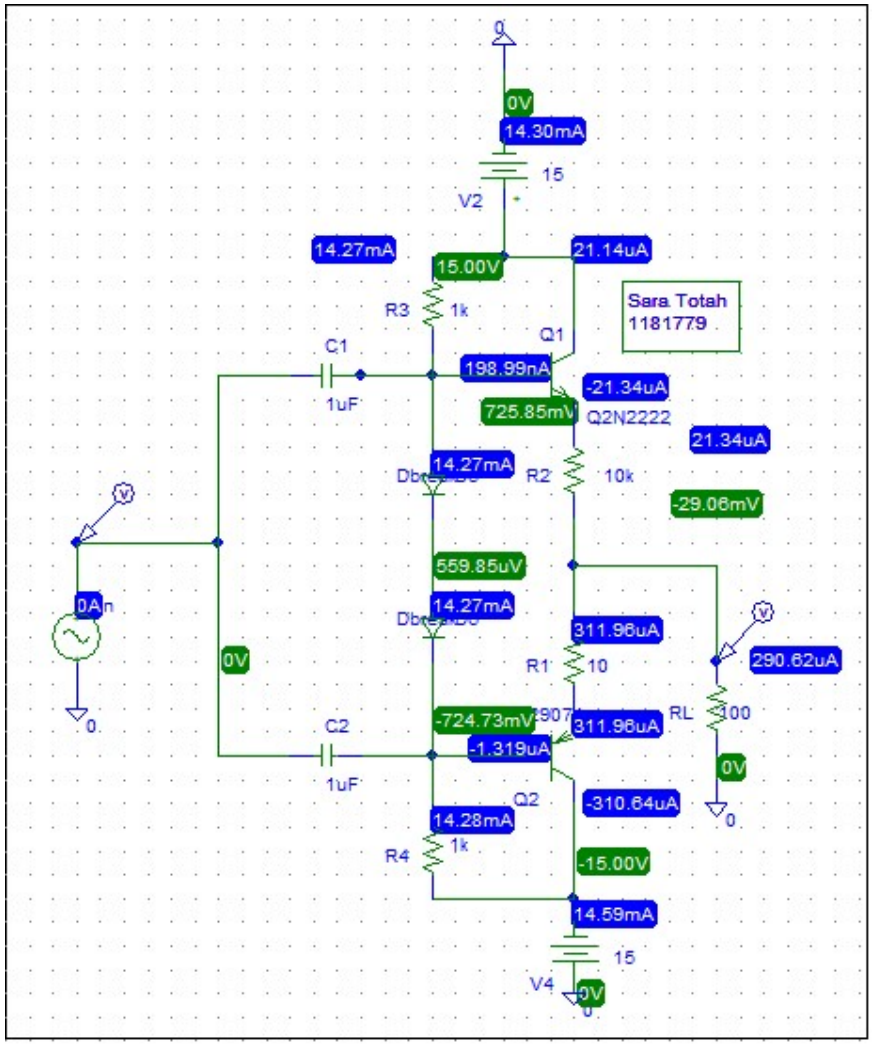


Figure (7-3): PSPICE simulation

$R_L = 100\Omega$