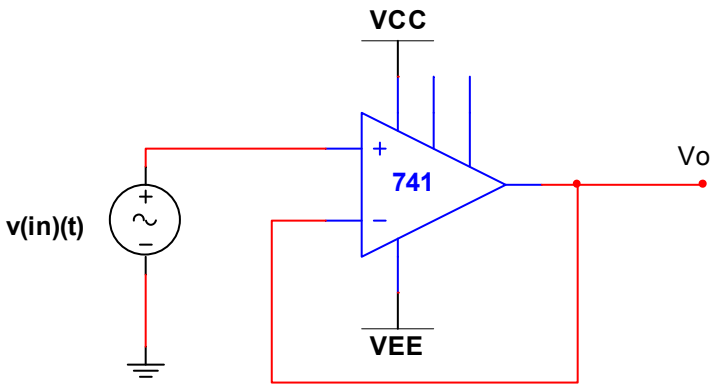
FLORIDA INTERNATIONAL UNIVERSITY
COLLEGE OF ENGINEERING AND COMPUTING
DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

EEL 3110L-CIRCUITS LAB

FIFTH ACTIVITY: Op-Amps II

Please do the computer simulations before or after the lab
(it's recommended that you do them before).

1- Set up the following circuits with the Op-Amp properly biased (Not shown).



$v_{in}(t) = V_m sin(\omega t)$

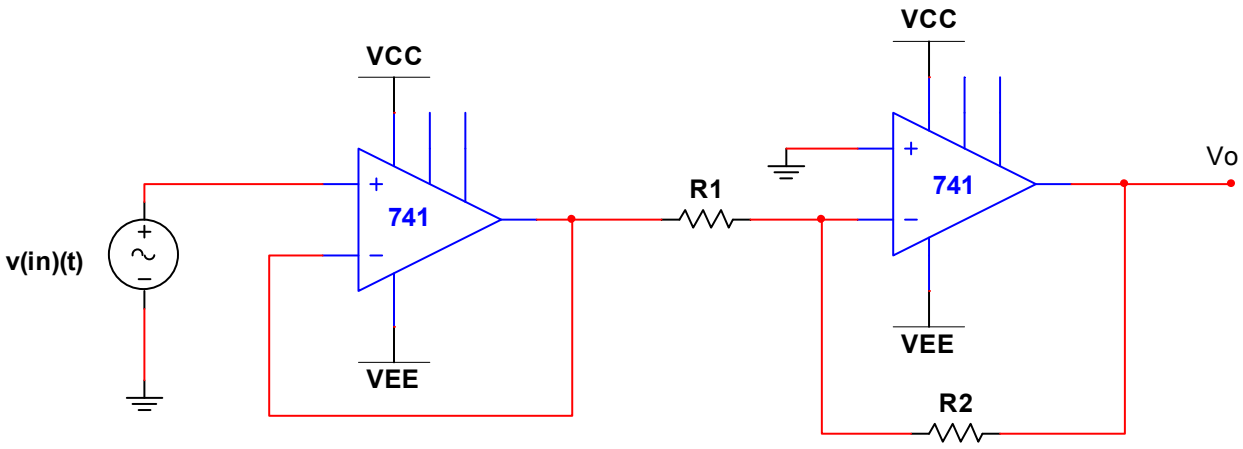
$V_m \geq 1$ volt

Measure and Graph $v_o(t)$ for each ω:

ω = 205 rad/s, 6283 rad/s, 125663 rad/s.

Briefly explain and comment your results

2- Set up the following circuit.



***note: V_{cc} and V_{ee} are not shown in the drawing. Use the same value of V_{cc} and V_{ee} as before.

$v_{in}(t) = V_m sin(\omega t)$

$V_m \geq 1$ V

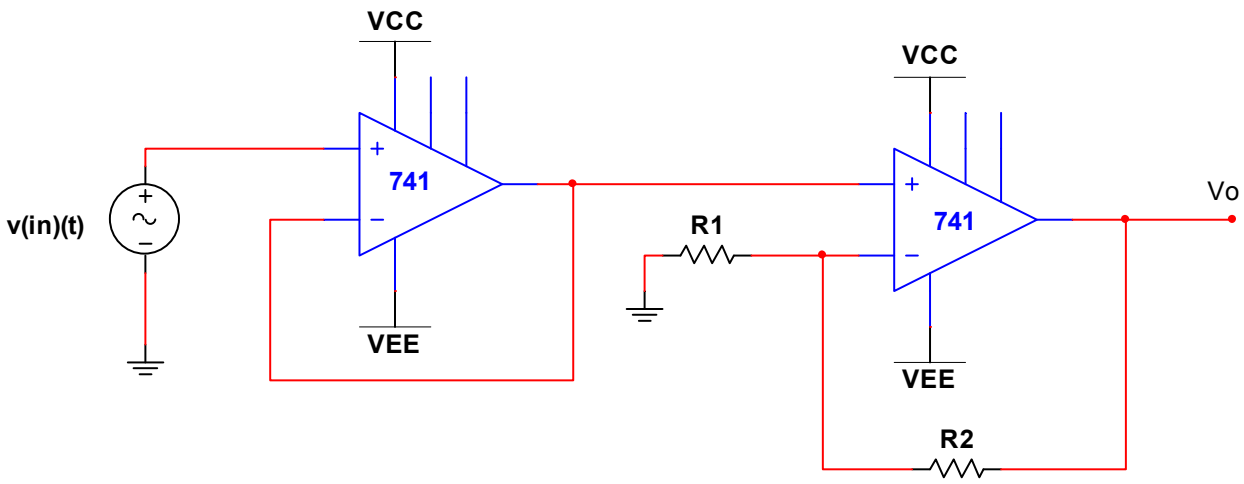
$\omega \geq 6283$ rad/s

Measure and Graph Vin(t) and Vo (compare it in the same window) for the given conditions.
Take note of the gain: ($A_v = \frac{v_0}{v_{in}}$)

R1 = R2
R1 > R2
R1 < R2
R1 = 100Ω, R2 = MΩ,

Briefly explain and comment your results.

3- Set up the following circuit.



***note: V_{cc} and V_{ee} are not shown in the drawing. Use the same value of V_{cc} and V_{ee} as before.

$v_{in}(t) = V_m sin(\omega t)$

$V_m \geq 1$ V

$\omega \geq 6283$ rad/s

Measure and Graph Vin(t) and Vo (compare it in the same window) for the given conditions. Take note of the gain: ($A_v = \frac{v_o}{v_{in}}$)

R1 = R2
R1 > R2
R1 < R2
R1 = 100Ω, R2 = MΩ,

Briefly explain and comment your results.

Write a brief summary of today activities. Remember to keep your records and own comments in your lab notebook.