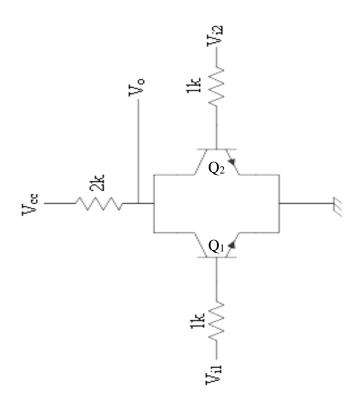
## Experiment # 4 Name of the experiment: Study of a RTL NOR gate.



## Procedure:

- 1. Measure the output voltage  $(V_0)$  for all possible input combinations.
- 2. Connect the  $V_{i1}$  input to ground, vary  $V_{i2}$  and measure  $V_0$ .
- 3. Connect the  $V_{i2}$  input to ground, vary  $V_{i1}$  and measure  $V_0$ .

## Questions:

- 1. Analyze the operation of RTL NOR gate with the experimental data.
- 2. What is the importance of studying the RTL gate? [Hint: Millman pg. 162]
- 3. Draw the  $V_0$  vs.  $V_{i1}$  and  $V_{i2}$  curves.

## Report:

- 1. Objective.
- 2. Circuit diagram
- 3. Answer to the questions.
- 4. Experimental data.
- 5. Calculations.
- 6. Discuss the findings.