EE386 Lab1

Faculty of Engineering, University of Peradeniya

(a) Implement the following weighted resistor digital to analog converter (Figure 1) in PSpice.

(b) Explain the functionality of the DAC circuit.

(c) Derive the expression for 3 bit DAC.

(e) Vary the digital input form "000" to "111" and plot the curves V_0, V_2, V_4, and V_{DAC}

(f) Compute the analog voltages corresponding to digital inputs "011", "101" and compare those results to the simualtion results.

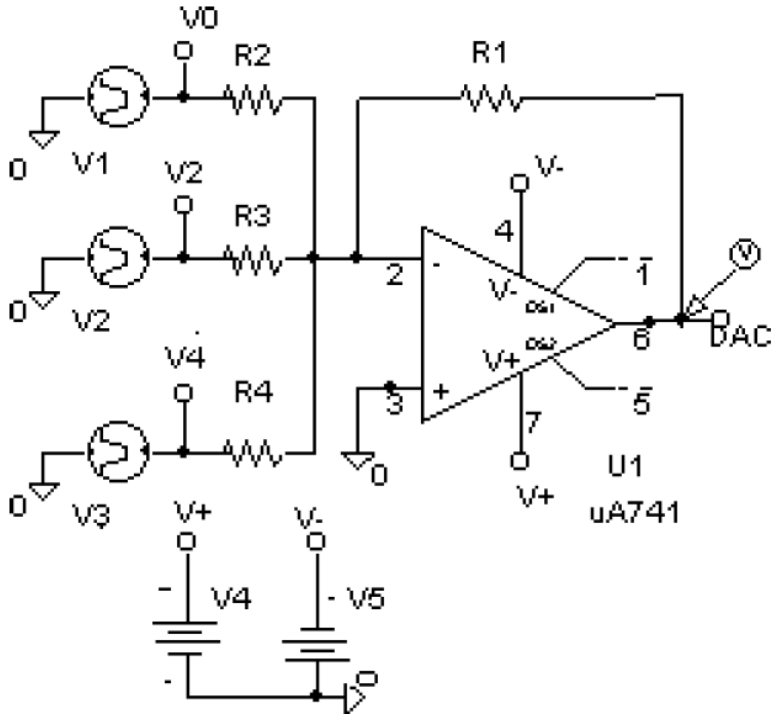

Figure 1. Weighted resistor digital to analog converter