Homework Assignment 6
Worksheet: D/A Converter

Problems
Cogdell: 5.28, 5.30, 5.31, 5.32

Notes
1. The advantage of the R/2R network is:
   - At the switch terminals, the switch changes from ground to virtual ground.
   - Only two different resistor values are required.

Procedure
1. Draw the circuit shown above. Try using time delay switches so that you can see the output as each switch opens.
2. Measure the output voltage for all 16 possible switch positions.
3. Quantitatively estimate the linearity of the resulting output.
4. Now replace the 2k resistor at switch D3 with a 1.9k resistor. How is the linearity affected?