## **D** to A Conversion

At some point, it is often useful to convert digital data back to an analog format. How could this be done? We can use another resistor network to reconstruct the analog waveform. Consider the circuit below.



The three bit digital input is applied to a digital decoder that asserts one output for each digital code. See the truth table for the 3 to 8 decoder. Each decoder output drives a transistor switch (shown figuratively as a mechanical switch) which connects a tap on the appropriate resistor network tap to the output. In this way, we can recreate the analog waveform from a digital signal