Title: Construction of Diode Logic Gates.

Introduction:

A diode is a two-terminal electrical device that allows current to flow in one direction but not the other. It is like a pipe with an internal valve that allows current to flow freely in one direction but shuts down if the water tries to flow backward. The diodes two terminal are called anode and cathode. In this diode symbol, the arrow points from the anode toward the cathode.

The device operates by allowing current to flow from anode to cathode, basically in the direction of the triangle. Recall the current is defined to flow from the more positive voltage toward the more negative voltage. If the diode anode is at a higher voltage than the cathode, the diode is said to be forward biased, its resistance is very low, and current flows. If the anode is at a lower voltage than the cathode, the diode is reverse-biased. its resistance is very high, and no current flows. The diode is not a perfect conductor. so there is a small voltage drop, approximately 0.7V, across it.

In this group of experiments we will implement some logic function using the DL circuit and discover the potential benefits and problems of using the DL logic.