1. What is the use of Flip-Flop in a digital circuit?

A flip flop is used to hold a single bit of information. This bit can be the output for one particular logic circuit, and the input for another logic circuit.

1. Explain the working of a D Flip-Flop and J-K Flip-Flop?

The J-K flip flop is an extention or enhancment of the S-R flip flop. You send a high signal to J to set the flip flop to high, and send a high signal to K to set the flip flop to low. It is better than a traditional S-R flip flop because the J-K handles situations where both inputs (J and K) are recieved at the same time. This input would produce undefined behavior on a S-R flip flop.

A D (delay) flip flop has a single input. If that input recieves a high value, then the value stored in the flip flop is set to high. If the input revieceves a low value, then the value stored in the flip flop is set to low.

1. Attach a snapshot of the circuit diagram for experiment-03 built in Multisim.

