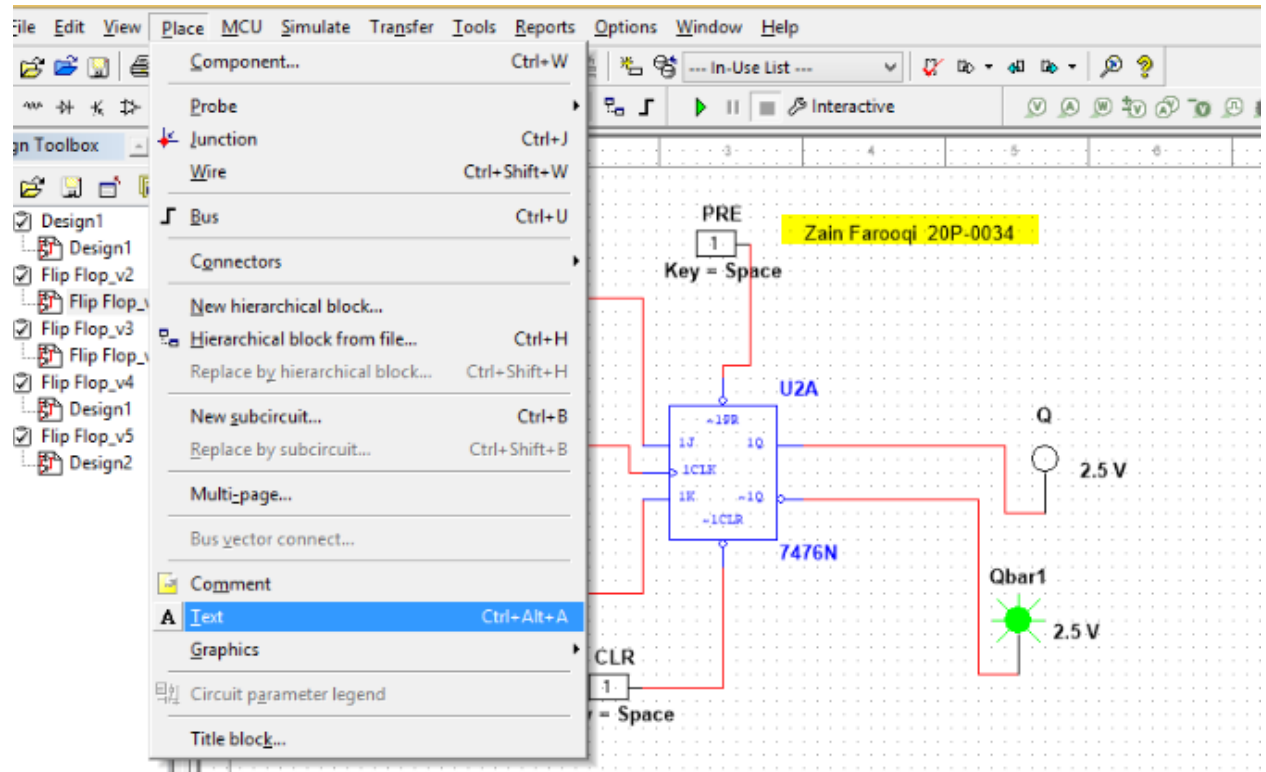# EL227- Digital Logic Design Lab

Lab # 13 Register

- **Use Multism/Logicly to design circuit diagrams.**
- **Label your inputs and outputs properly.**
- Note: Attach your name and roll no with each screen shot of circuit as shown below. Otherwise your lab task would not be accepted.

1. Test the functionality of T flip flop using IC-74LS76.
2. Implement the Serial In – Serial Out Shift Register and observe the working of 4-bit SISO shift register by sending the binary information **"1011"** from LSB to MSB serially at the input.
3. Implement the Serial In – Parallel Out Shift Register and observe the working of 4-bit SISO shift register by sending the binary information **"1001"** from LSB to MSB serially at the input.

4. Implement the Parallel In – Serial Out Shift Register and observe the working of 3-bit SISO shift register by sending the binary information **"010"** using the following Circuit as shown below.
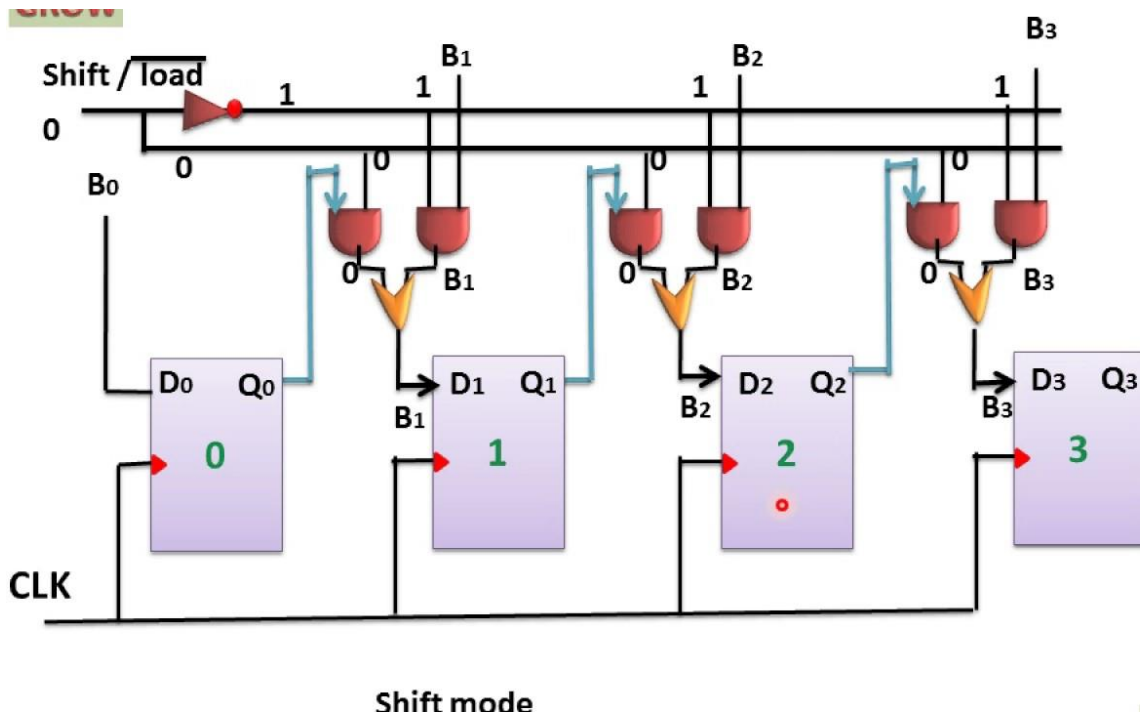

Figure 1 PISO