**Cal Poly Pomona**
**ECE Dept.**

**ECE 2300L Lab # 8 Dr. Rafi**

## Prelab

**Design a 2732-based EPROM system to display square of a BCD digit on seven segment displays. Use a minimum number of 74LS47 BCD to seven segment converters. Each BCD digit will be input to the EPROM via DIP switches.**

## LAB

**Parts List: Determine the required parts.**
**Implement the above circuit , and demonstrate its operation.**

## Postlab

**1. What is the basic differences between :**

**(a) Volatile and nonvolatile memories.**
**(b) EPROM and EEPROM.**
**(c) SRAM and DRAM.**
**(d) PLD and ROM.**
**(e) CPLD and FPGA.**

**2. Draw block diagrams showing enamel, address, and data lines for each of the following: 2732, 2764, 27128, and 27256.**
**3. Draw a schematic for a 6k X 8-bit memory array using a minimum number of 2732's. What are the highest and the lowest memory addresses (in hex) in the array?**