TUTORIAL 1

1. Make a list of 10 products containing microprocessors that we use everyday.
2. Describe the circumstances that would prompt you to use a microprocessor-based design solution instead of a hard-wired IC logic design.
3. In a 8-bit microprocessor system, how many lines are in the data bus? The address bus? What about 16-bit microprocessor systems?
4. How many different addresses can be accessed using the 16-bit address bus?
5. Draw a block diagram for a computerized cash register. The hardware should include a numerical display, a keyboard, and a compact printer.
6. Explain the meaning of software, hardware and firmware.
7. Name the major components in a microcomputer system and describe the functions of each.
8. What is system bus? Discuss the signals that must be available for an effective bus operation.
9. Describe the microprocessor execution cycle.
10. Describe the difference between a microcomputer and a microprocessor.