

Microprocessor and Interfacing

Assignment: 2

1	Difference between high level language and low level language.
2	Draw the functional block diagram of internal architecture of 8085 and explain its working.
3	Draw and explain programming model of 8085 microprocessor.
4	Explain (i) ALU (ii) Program counter (iii) Instruction decoder (iv) Stack Pointer
5	How does microprocessor differentiate between an opcode and data? Explain the same with the timing diagram for fetch and execution cycle.
6	Using diagram illustrate logic pin out of the 8085 Microprocessor.
7	Some of the pins of 8085 are listed below. For each pin (line) show whether it is an input line or output line and mention its function. (1) ALE (2) HOLD (3) SID (4) READY (5) TRAP (6) INTR (7) RESET IN
8	List and explain categories of 8085 instructions that manipulate data.
9	State the function of following instructions. [i] LHLD 16-bit [ii] XCHG [iii] DAD H [iv] RAL [v] LDAX Rp [vi] XTHL [vii] PCHL
10	What do you understand by the term addressing mode? Explain the addressing modes supported by 8085 by giving suitable examples.
11	Explain the working of rotate instructions of 8085 with proper example in each case.
12	Compare (i) Call and jump instruction (ii) serial and parallel data transfer.
13	Define: Instruction cycle, Machine Cycle & T-state.
14	What is conditional & unconditional branching? Illustrate the answer with an example.
15	Write a program to generate a continuous square wave with the period of 500us. Assume system clock period is 325ns and use bit D ₀ to output the square wave.