



3. Draw a flow chart and write a program to count from 0 to 9 with a one second delay between each count. At the count of 9, the counter should reset itself to zero and repeat the sequence continuously. The clock frequency of the microcomputer is 1 MHz.
4. What is the function of addressing modes? Discuss various addressing modes of 8086 microprocessor giving at least two examples of each.
5. Differentiate between Minimum and Maximum mode. Write down the various characteristics of minimum mode.
6. List the different characteristics of 8255. Also write down the configuration of control word in I/O mode of 8255.

### SECTION-C

7. Discuss the following instructions w.r.t. 8085 :
  - a) XTHL
  - b) PCHL
  - c) STC
  - d) NOP
  - e) HLT
  - f) SHLD
  - g) SIM
  - h) ANI 00H
  - i) XCHG
  - j) DAA
8. What is DMA data transfer scheme? Discuss the functions of DMA controller 8257 in detail.
9.
  - a) Draw the flow chart and write a programme to add the content of the memory location 2000H:0500H to the contents of 3000H:0600H and store the result in 5000H:0700H.
  - b) Differentiate between Minimum and Maximum mode. Write down the various characteristics of minimum mode.

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