Assignment 2

CP304: Processor Architecture

1. What are the differences between Minimum and Maximum mode of 8086
2. Show the interfacing of 8087 with 8086. Also discuss communication between 8086 and 8087
3. Briefly discuss data types of 8087
4. Interface matrix key board (4X4) and 3 digit Seven Segment display with 8086. Also write assembly code which find key code and display on seven segment. Use 8255 as I/O port
5. Interface 8 bit ADC with 8086. Connect EOC of ADC with INTR interrupt of 8086. Use 8255 and 8259. Also write main routine and ISR
6. Briefly explain the steps carried out by 8086 to respond any interrupt
7. Suppose processor is executing divide instruction and divide by zero error occur and same time interrupt signal is received on NMI pin, what processor will do?
8. Why we used IRET instead of RET at the end of ISR?
9. Interface 8 bit DAC with 8086. Generate triangular waveform with frequency of 2KHZ
10. How trap flag can be set and reset in 8086?