Topic 4 : TIMERS



Problem 1 : Write a C Program Using Timer 0 , Normal mode , interrupt method to toggle PORTB.4 with time interval 0.1ms using. The system use 8MHz clock, prescaler /256.

Problem 2 : Write a C Program Using Timer 0 , CTC mode , interrupt method, to toggle PORTA.2 with time interval 0.1 ms. the system use 8MHz clock, prescaler /256.

Problem 3 : Write a C Program Using Timer 1 , Normal mode , interrupt method to toggle PORTD.6 with time interval 0.5s. the system use 8MHz clock, prescaler /1024.

Problem 4 : Write a C Program Using Timer 1 , CTC mode , interrupt method, to toggle PORTC.2 with time interval 0.2s. the system use 8MHz clock, prescaler /1024.

Problem 5 : Write a C Program Using Timer 2 , Normal mode , interrupt method to toggle PORTC.3 with time interval 0.4 ms using prescaler /256. the system use 8MHz clock, prescaler /256.

Problem 6: Write a C Program Using Timer 2 , CTC mode , interrupt method, to toggle PORTB.5 with time interval 0.5 ms using prescaler /256. the system use 8MHz clock, prescaler /256.

Problem 7: Convert the C program in Problem 5 into AVR Assembly code.