## **AVR Lab**

## **Day 1:**

Go through the day 1 ppt, compile and simulate a simple assembly level program.

## Day 2:

- 1) Study well the Instruction Set of AVR and also the data sheet.
- 2) Add, Subtract two HEX numbers check the changes in SREG register. (Also try with carry).
- 3) Add a block of 10 Data bytes and store the result in the memory.

## **Day 3:**

- 1) Multiply two 8-bit data without using the MUL instruction. Do the same for 16-bit.
- 2) Divide two 8-bit data without using the DIV instruction. Do the same for 16-bit.
- 3) Sort 10 numbers in ascending and descending order and store them separately without changing the original array.
- 4) Write a delay subroutine to give an exact delay of 2sec.(Test by outputting 0x55 and 0xaa alternately on the LED's using port B if possible ).