



**Department of Computer Science & Engineering**  
**Microprocessor & Computer Architecture**  
**MPCA-Laboratory/Assignment/Hands-on/Project**  
**UE20CS252**

Sl. No	Programs
Week No.5	<ol style="list-style-type: none"><li>1. Write a program in ARM7TDMI-ISA to generate Fibonacci Series and store them in an array.</li><li>2. Write a program in ARM7TDMI-ISA to find smallest number in an array of n 32 bit numbers</li><li>3. Write a program in ARM7TDMI-ISA to multiply 2 matrices of order 3. i.e., implement <math>c[i][j] = a[i][j] \times b[i][j]</math>.<ol style="list-style-type: none"><li>a. Use MLA instruction</li><li>b. Use MUL instruction</li></ol></li><li>4. Write a program in ARM7TDMI-ISA to transfer a block of 256 words stored at memory location X to memory location Y using Load Multiple and Store Multiple instructions. The rate of transfer is 32 bytes.</li></ol> <p><b>Student exercises:</b></p> <ol style="list-style-type: none"><li>1. Write a program in ARM7TDMI-ISA to add 2 matrices of order 3. i.e., Implement <math>c[i][j] = a[i][j] + b[i][j]</math>.</li><li>2. Write a program in ARM7TDMI-ISA to find the NORM of a square matrix of order n.</li><li>3. Write a program in ARM7TDMI-ISA to find the ROWSUM of a matrix.</li></ol>