

**Department of Computer Science & Engineering**

**Microprocessor & Computer Architecture**

**MPCA-Laboratory/Assignment/Hands-on/Project**

**UE20CS252**

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| **Sl. No** | **Programs** |
| **Week No.5** | 1. Write a program in ARM7TDMI-ISA to generate Fibonacci Series and store  them in an array.  2. Write a program in ARM7TDMI-ISA to find smallest number in an array of n  32 bit numbers  3. Write a program in ARM7TDMI-ISA to multiply 2 matrices of order3.  i.e., implement c[i][j]=c[i][j] x a[i][j] x b[i][j].  a. Use MLA instruction  b. Use MUL instruction  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.  **Student exercises:**  1. Write a program in ARM7TDMI-ISA to add 2 matrices of order3.  i.e., Implement c[i][j]= a[i][j] + b[i][j].  2. Write a program in ARM7TDMI-ISA to find the NORM of a square matrix of  order n.  3. Write a program in ARM7TDMI-ISA to find the ROWSUM of a matrix. |