

**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. Display the element if found. 3. Write a program in ARM7TDMI–ISA to add 2 matrices of order3.   i.e., implement c[i][j] = a[i][j] + b[i][j].   1. 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 multiply 2 matrices of order3.   i.e., implement c[i][j] = c[i][j] + a[i][j] x b[i][j].   1. Use MLA instruction 2. Use MUL instruction 3. Write a program in ARM7TDMI–ISA to find the NORM of a square matrix of order n. 4. Write a program in ARM7TDMI–ISA to find the ROWSUM of a matrix. |