

**Department of Computer Science & Engineering**

**Microprocessor & Computer Architecture**

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

**UE20CS252**

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| **Sl. No** | **Programs** |
| **Week No.2** | 1. Write a program in ARM7TDMI-ISA to copy a block of N data items from Location A to Location B.  a. Use Full word (.word directive)  b. Use Half word(.Hword directive)  C . Use Byte wise (.Byte directive)  2. Write a program in ARM7TDMI-ISA to find the sum of N data items in the memory. Store the result in the memory location.  a. Use Full word (.word directive)  b. Use Half word(.Hword directive)  c. Use Byte wise (.Byte directive)  {1,2,3,4,5}  3. Write a program in ARM7TDMI-ISA to find the sum of N natural numbers. Store the result in the memory location.  ;;4. Write a program in ARM7TDMI-ISA to find the product of two 32bit numbers using barrel shifter.  5. Convert the following statement in C language into an ALP using ARM7TDMI – ISA.  IF([A]==[B]) then C=[A]+[B];  ELSE IF ([B]==[C]) D=[A]-[B];  ELSE E=[A]\*[B]  Where A,B C, D & E are memory locations.  6. Write a program in ARM7TDMI-ISA to find the factorial of a number.    **Execute question 2, 3,5** |