

**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)  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. |