

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

## UE20CS252

SI. No	Programs
Week No.3	<ol> <li>Write a program in ARM7TDMI-ISA to find GCD of two numbers.</li> <li>a. Assume operands to be in the CPU registers</li> <li>b. Assume operands in the memory locations.</li> </ol>
	<ol> <li>Write a program in ARM7TDMI-ISA to find the sum of N data items in the memory. Store the result in the memory location.         <ul> <li>Use Pre-indexing addressing mode</li> <li>Use Post- Indexing addressing mode</li> <li>Use Auto-indexing addressing mode</li> </ul> </li> </ol>
	<ol> <li>Write a program in ARM7TDMI-ISA to find the sum of N data items at alternate [ odd or even positions] locations in the memory. Store the result in the memory location.         <ol> <li>Use Pre-indexing addressing mode</li> <li>Use Post- Indexing addressing mode</li> <li>Use Auto-indexing addressing mode</li> </ol> </li> </ol>
	<ul> <li>4. Write a program in ARM7TDMI-ISA to search for an element in an array. Store 00 if the search is unsuccessful and 01 if the search is successful in the register.</li> <li>a. Use Linear Search Technique</li> <li>b. Use Binary search Technique</li> </ul>