

**Department of Computer Science & Engineering**

**Microprocessor & Computer Architecture**

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

**UE20CS252**

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| **Sl. No** | **Programs** |
| **Week No.1** | 1. **Sample programs (Mostly done in the Theory Class)**    1. Write an ALP using ARM instruction set to add and subtract two 32 bit numbers. Both numbers are in registers.    2. Write an ALP to demonstrate logical operations. All operands are in registers.    3. Write an ALP to add 5 numbers where values are present in registers.   **2. Assignment: (During Hands-on Hour / Practical session)**   * 1. Write an ALP using ARM instruction set to check if a number stored in a register is even or odd.   2. Write an ALP to compare the value of R0 and R1, add if R0 = R1, else subtract.   3. Based on the value of the number in R0, Write an ALP to store 1 in R1 if R0 is zero, Store 2 in R1 if R0 is positive, Store 3 in R1 if R0 is negative. |

**Course Information**