

## Lab[02]- ARMv7 assembly

**Problem1:** Write an ARM7 assembly program to multiply two numbers stored in R7 and R8 (assume both are positive), using repeated addition, and store the result in R9.

**Problem2:** Write an ARM7 assembly program to calculate the factorial of a number stored in R0 (assume R0 contains a positive integer), and store the result in R1.

**Problem3:** Write an ARM7 assembly program that divides R0 by R1 using repeated subtractions.

**Problem4:** Write an ARM7 assembly program that searches for R0 inside an integer array of 100 items.

**Problem5:** Write an ARM7 assembly program to count the number of odd integers in an array of 100 elements. Store the count in R5.

**Problem6:** Write an ARM7 assembly program to calculate the sum of the squares of even numbers in an array of 75 integers. Store the sum in R8.