

Problem 1:

Write an ARM7 assembly program that reads 3 numbers from the memory, adds them and stores the result back in the memory.

Problem 2:

Write an ARM7 assembly program that reads 2 numbers from the memory, finds the largest number and stores the largest in R5.

Problem 3:

Write an ARM7 assembly program that sums up elements of an array that contains 8 elements then calculates the average and stores both the sum and average in the memory.

Problem 4:

Write an ARM7 assembly program that after reading the elements of an array of 10 elements, gets the maximum and the minimum and stores them in registers R5, R6 respectively. Hint: Assume that initial value of maximum =0 and minimum =1000.

Problem 5:

Write an ARM7 assembly program that after reading the elements of an array of 10 elements that contains negative, positive and zero numbers, counts the zeros and stores it in R7, and stores the negative numbers in another array.

Problem 6:

Write an ARM7 assembly program that given a hexadecimal number 0xAB5F, should swap the values of bits from 0 to bits 7 with bits 8 to 15, so that the value become 0x5FAB using logic operations. Any value needed in the problem must be read from the memory.