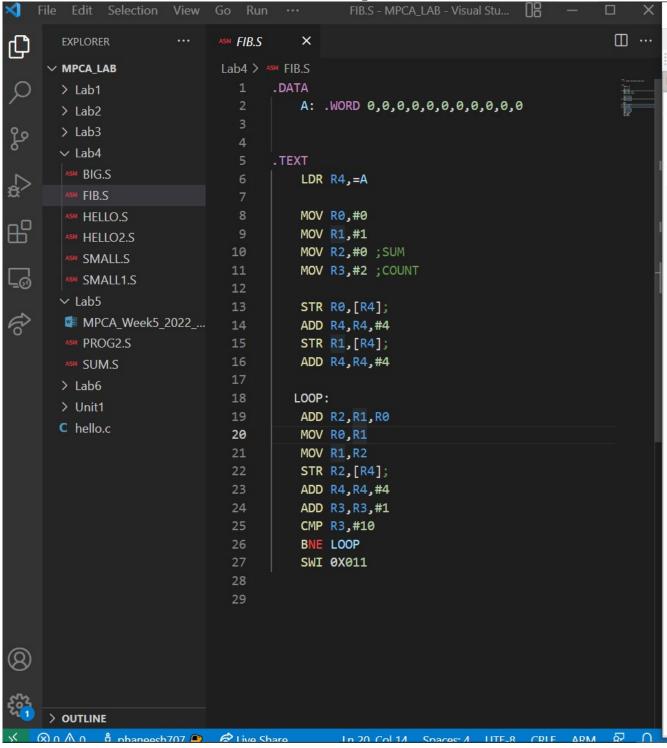
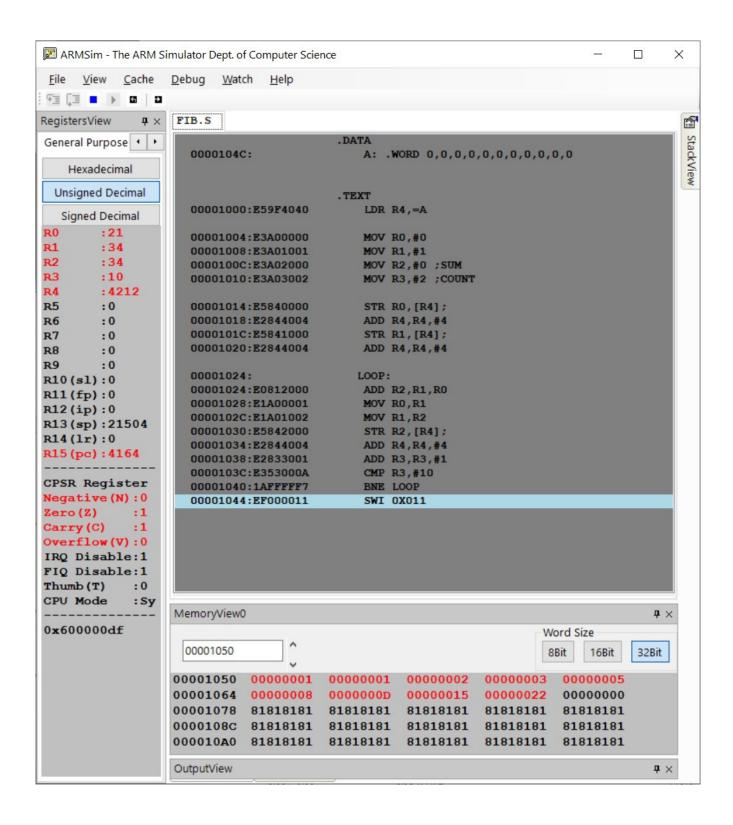
ARM7TDMI PROGRAMMING WEEK-5

PHANEESH PES1UG20CS584 J SECTION

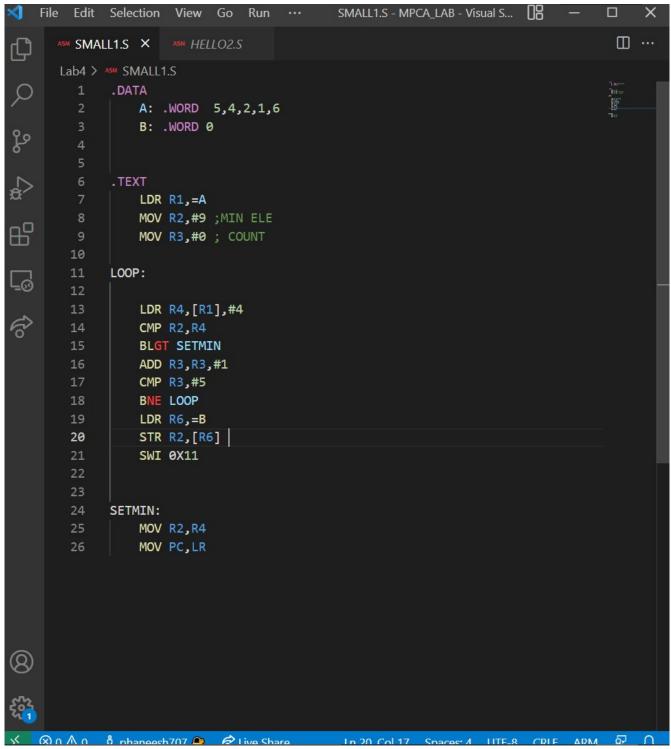
1. Write a program in ARM7TDMI-ISA to generate fibonacci

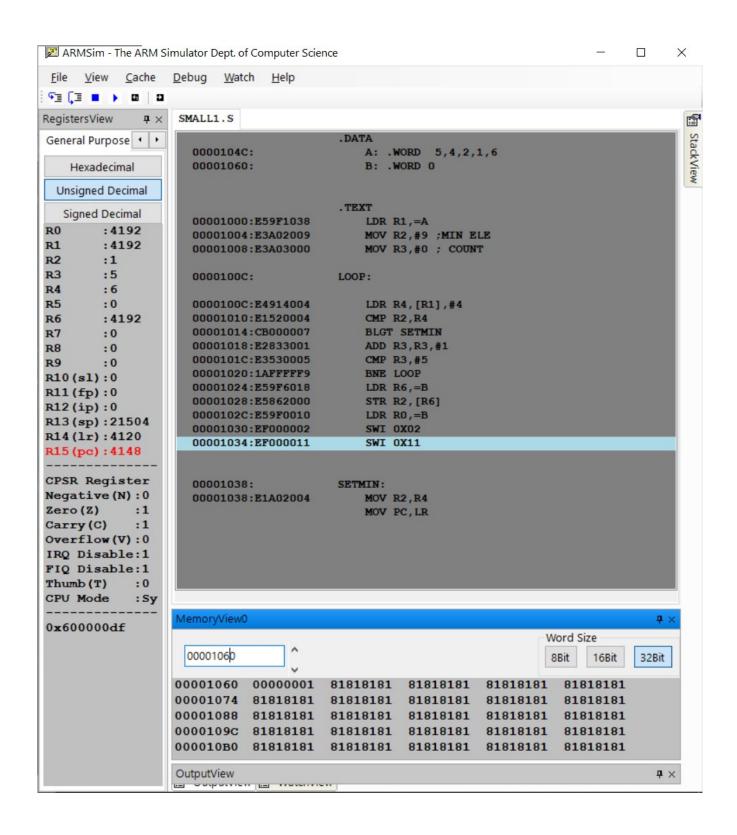
Series and store them in an array.



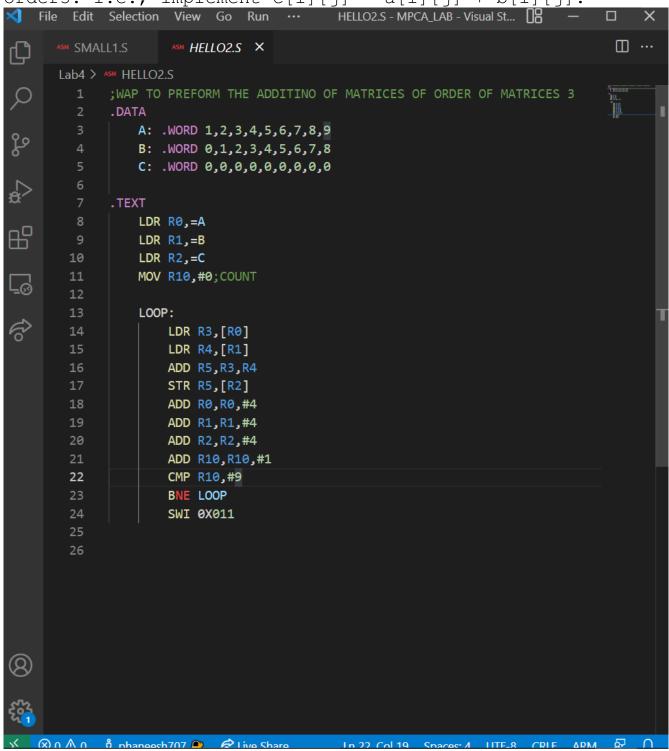


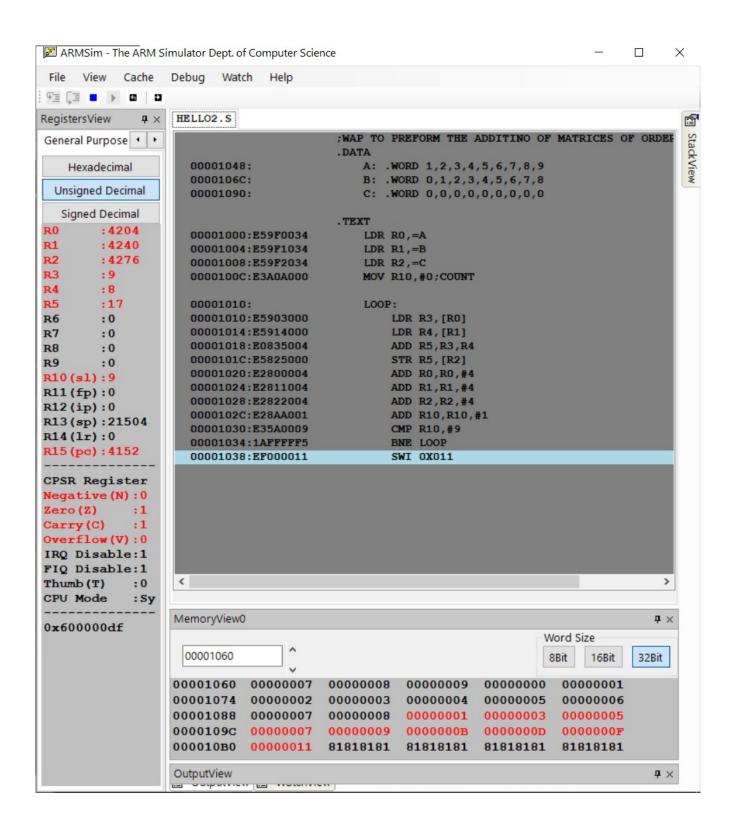
2. Write a program in ARM7TDMI-ISA to find smallest number in an array of n 32 bit numbers. Display the element if found.



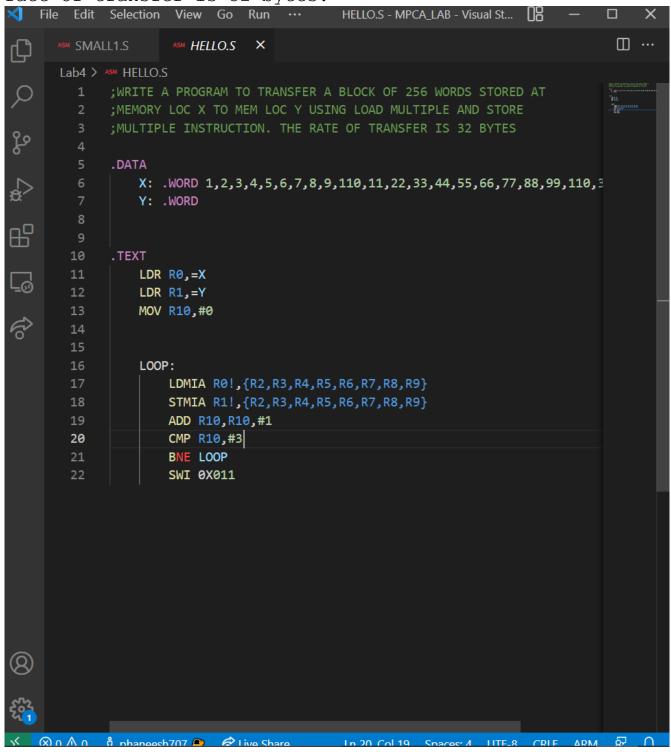


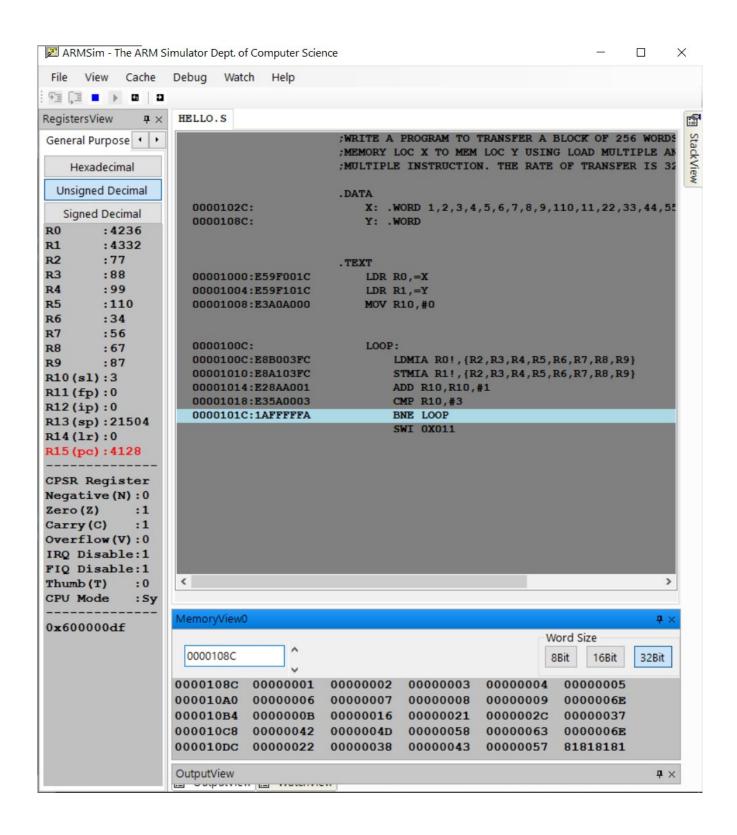
3. Write a program in ARM7TDMI-ISA to add 2 matrices of order3. i.e., implement c[i][j] = a[i][j] + b[i][j].





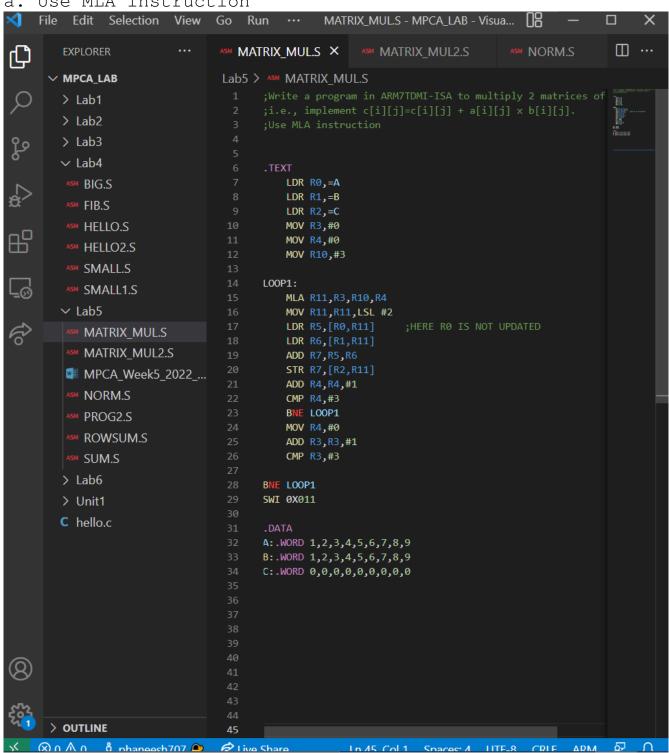
4. Write a program in ARM7TDMI-ISA to transfer a block of 256 words stored at memory location X to memory location Y using Load Multiple and Store Multiple instructions. The rate of transfer is 32 bytes.

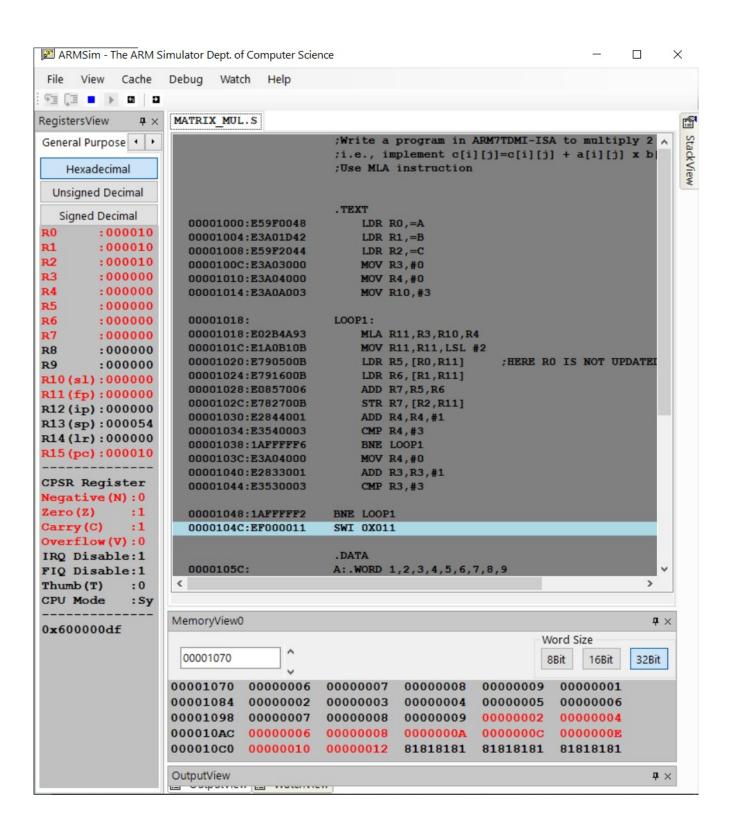




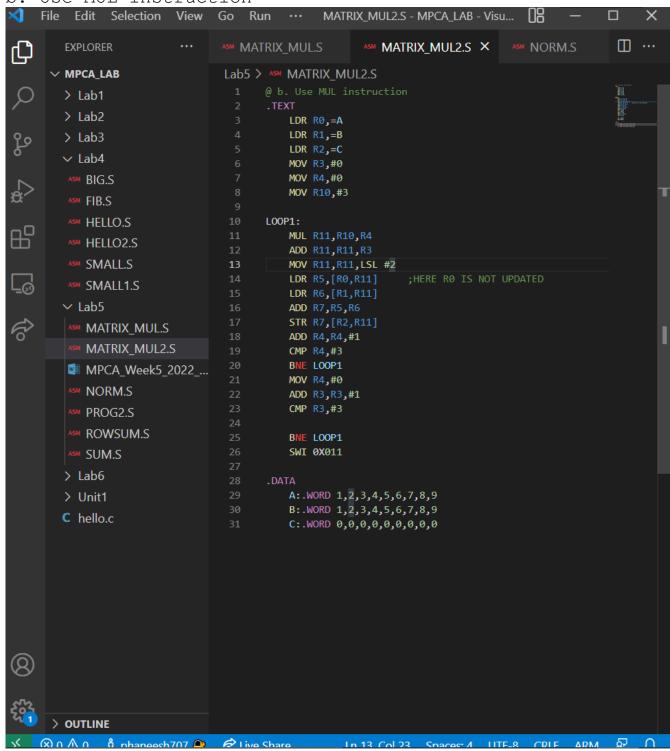
Student exercises:

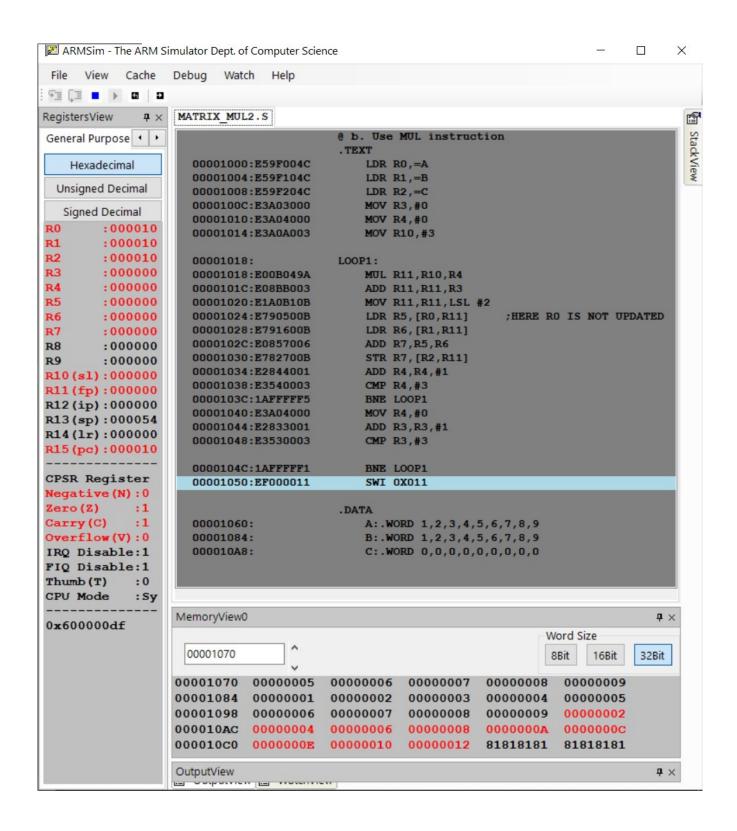
- 1. Write a program in ARM7TDMI-ISA to multiply 2 matrices of order3. i.e., implement $c[i][j] = c[i][j] + a[i][j] \times b[i][j]$.
- a. Use MLA instruction



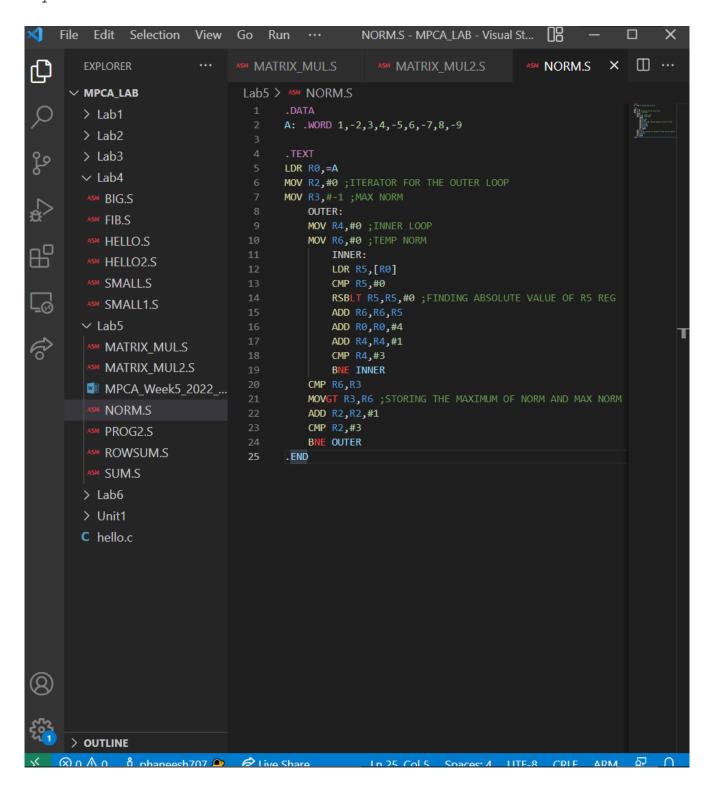


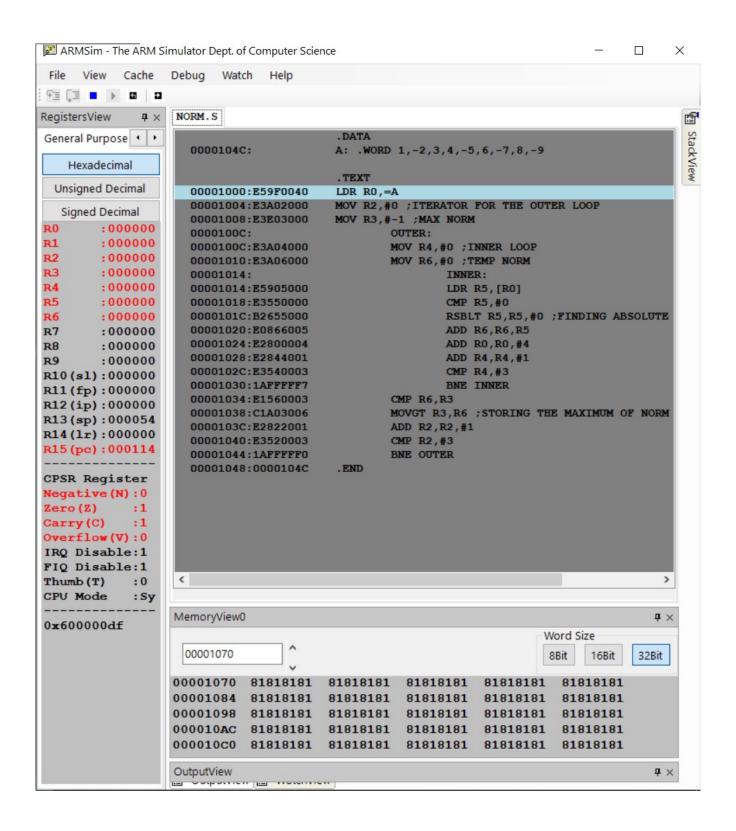
b. Use MUL instruction





2. Write a program in ARM7TDMI-ISA to find the NORM of a square matrix of order n.





3. Write a program in ARM7TDMI-ISA to find the ROWSUM of \mathtt{matrix}

