

**Department of Computer Science & Engineering**

**Microprocessor & Computer Architecture Lab**

**Lab 2 Programs**

**UE23CS251B**

|  |  |
| --- | --- |
| 1 | Write an ALP using ARM7TDMI to perform to multiplication of 16X25 without using MUL instructions.  (Hint: barrel shifter instructions.)  (Note :any number can be considered as multiplier)  Program screen shot:  Screen shot of Register set output: |
| 2 | Write an ALP using ARM7TDMI to add only even numbers stored in memory location for a given set of numbers and store the sum in the memory location.  Array:.WORD 15,10,12,13,9,45,16,8,25,33  evensum:.WORD  Program screen shot:  Screen shot of Register set output and memory location: |
| 3 | Write a ALP using ARMTDMI-ISA to store odd and even numbers in separate memory locations starting from LOCA and LOCB respectively  ARRAY: .word 10,50,41,55,30,20,11,5,100,77  LOCA: .word 0,0,0,0,0,0  LOCB: .word 0,0,0,0,0,0  Program screen shot:  Screen shot of Register set output and memory location: |
| 4 | Write an ALP using ARM7TDMI to find the largest number from a given set of numbers:  A: .word 10,50,41,55,30,20,11,5,100,77  Program screen shot:  Screen shot of Register set output and memory location: |
|  | Assignments Questions |
| 5 | Write an ALP using ARM7TDMI to find whether the given number is even parity.  Program screen shot:  Screen shot of Register set output: |
| 6 | Write an ALP using ARM7TDMI to multiplication of 38X72 without using MUL instructions.  (Hint: barrel shifter instructions.)  (Note :any number can be considered as multiplier)  Program screen shot:  Screen shot of Register set output: |