Department of Computer Science & Engineering (AI & ML)
Microprocessor & Computer Architecture Lab

Lab 1 Programs

UE23CS251B

1	Write an ALP to perform Addition for of two numbers of size a)64 bit b)128 bit save the result in register (reuse the register to store the result) Hint: For 128 bit given below R3 R2 R1 R0 +R7 R6 R5 R4
2	Write an ALP to perform 2'complement only using mov and RSB instruction.
3	Write an ALP to perform not operation only using mov and bitwise logical instructions.
4	Write an ALP to subtract if the numbers are equal, otherwise add them.

5	Check if a given number is even or odd.
	     Note: at the end of the program execution R2 contains 0 if number is
	        even, otherwise R2 contains 1.

6	Write a program to find the factorial of a given number.
7	Write a program to find GCD of two numbers.