**BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI**
**II SEMESTER 2018-2019**
**EEE/CS/INSTR F241 MICROPROCESSOR PROGRAMMING AND INTERFACING**
**Lab3: ALP #3 (OPEN BOOK)**

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**Task1:**
Write an ALP that finds the maximum unsigned number from a set of 15 bytes stored at location **ARRAY1**. Now, the ALP must store the maximum number at location **GREAT1**.

**ARRAY1** db 45H, 54H, 0F4H, 56H, 99H, 0F9H, 0F0H, 87H, 66H, 23H, 54H, 0F3H, 0F6H, 9CH, 0FEH

**Task2:**
Write an ALP that will count the number of negative numbers in an array of 16-bit signed data stored from location 'DAT1'. The number of elements in the array is present in location 'COUNT'. The final count of negative numbers must be stored in location 'NEG1'

Hint:
DAT1 dw 0EF45H, 4554H, 0F4567H, 9999H, 8F98H, 8766H, 23543H, 5678H,9900H, 9C44H
COUNT db 0AH
NEG1 db ?

**Lab3 Plan:**

1. **Assign Task 1 and then Task 2 ( Tell them to follow the sequence and show the results...it will be easier for you during evaluation)**
2. **Please provide help related to the usage of MASM**
3. **Then tell them to write code.....what should be the extension...(revision)**
4. **Briefly, discuss how to check the working of ALP**
5. **Marking scheme (1.5M + 1.5M), please show marks.**