Lab 5 tut practice questions

Question 1:

Write an 8086 Assembly (MASM) program to run on DOSBOX that reads a single-digit integer n from the user and prints a right-angled star pattern of n + 1 rows. Row **i** must contain **i+1** stars. Use Int 21h interrupts for input and output.

Example:
Input: 3
Output:
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Test Cases:

1. Input: 0
   Output:
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2. Input: 2
   Output:
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Question 2:

Write an 8086 Assembly (MASM) program to run on DOSBOX that reads a string using buffered input (INT 21h, AH = 0Ah). Convert all lowercase letters to uppercase and all uppercase letters to lowercase. Non-alphabetic characters must remain unchanged. Display the modified string.

Example:
Input: Hello123
Output: hELLO123

Test Cases:

1. Input: abc
   Output: ABC

2. Input: XYZ
   Output: xyz
3. Input: Hello World!
   Output: hELLO wORLD!
4. Input: 1234
   Output: 1234
5. Input: AaBbCc
   Output: aAbBcC