

**SSN College of Engineering**  
**Department of Computer Science and Engineering**  
**III year - UCS1512 – Microprocessors Lab**

Academic Year: 2022 -2023  
Semester: V

Batch: 2020-2024

**Experiment No. 8: Case conversion**

**Input:** letters through keyboard

**Output:** case converted letters on the fly

**Hint:**

Use dos interrupt 21H with AH=01 to read the letters with echo

Use AH=2 to display the letters to standard output device

**Program**

```
ASSUME CS:CODE,DS:data
data SEGMENT
COUNT equ 10h
data ends
CODE SEGMENT
START:MOV AX,data
      MOV DS,AX
      MOV CX,COUNT ; LOOP COUNTER
L1:MOV AH,1 ; INPUT CHARACTER,
    INT 21H ; AL = CHARACTER, ASCII(hex) :A-Z=41-5A, a-z=61-7A
    CMP AL,60H
    JNC UPPER
    ADD AL,20H
    JMP SKIP
UPPER:SUB AL,20H ; CONVERT TO UPPER CASE
SKIP:MOV AH,2 ; CHARACTER OUTPUT FUNCTION
      MOV DL,AL ; CHARACTER MUST BE IN DL
      INT 21H ; DISPLAY THE CHARACTER
      LOOP L1 ; REPEAT LOOP
      MOV Ah,4CH
      INT 21H
CODE ENDS
end start
```