**CS401 Assignment NO.2 Solution 2020**

**Name:**

**STUDENT ID:**

[org 0x0100] ; offset

jmp start ; jump to start label

Array1: db 'A', 'B', 'C', 'D', 'E', 'F', 'G', 'H', 'I', 'J', 'K', 'L', 'M'

Array2: db 'n', 'o', 'p', 'q', 'r', 's', 't', 'u', 'v', 'w', 'x', 'y', 'z'

Array3: db ' ', ' ', ' ', ' ', ' ', ' ', ' ', ' ', ' ', ' ', ' ', ' ', ' ', ' ', ' ', ' ', ' ', ' ', ' ', ' ', ' ', ' ', ' ', ' ', ' ', ' ', ' ',

start:

 mov bx, 0

 mov cx, 13

lower\_case:

 mov al, [Array1+bx]

 mov dl, al

 add dl, 32

 mov [Array3+bx], dl

 add bx, 1

 loop lower\_case

 mov bx,0

 mov cx, 13

upper\_case:

 mov al, [Array2+bx]

 mov dl, al

 sub dl, 32

 mov [Array3+bx+13], dl

 add bx, 1

 loop upper\_case

 mov bx,0

 mov cx, 26

print\_result:

 mov al, [Array3+bx]

 mov dl, al

 mov ah, 02

 int 21h

 add bx, 1

 loop print\_result

exit:

 mov ax , 0x4c00 ; terminate

 int 0x21