

4/11/2020

Lab - program 3

To print the ascii value of input

- MODEL SMALL

- DATA

MSG1 DB 0DH, 0AH, "Enter Alphanumeric
character: \$"

RES DB 02H DUP(0)

- CODE

MOV AX, @DATA

MOV DS, AX

LEA DX, MSG1

CALL ~~DISP~~

MOV AH, 01H ; Reading input from keyboard
INT 21H

MOV BL, AL ; 0A is the input will be stored
MOV CL, 4 ; always in al & bl register

SHR AL, CL ; 0DH

CMP AL, 0AH

JC DIGIT ; AL < 0AH CARRY IS GENERATED
; SO NOW ONLY ADD 30H

ADD AL, 07H

DIGIT:

ADD AL, 30H ; 30H

MOV RES, AL

AND BL, 0FH ; BL = 0AH

CMP BL, 0AH

JC DIGIT1

ADD BL, 07H ; BL = 0A + 07H

DIGIT1:

ADD BL, 30H ; $BL = 0A + 07 + 30 = 0A + 37 = 41H$
MOV RES+1, BL

MOV AH, 00H ; clear the screen
MOV AL, 03H
INT 10H

MOV AH, 02H ; set the cursor position
MOV BH, 00H
MOV DH, 0CH ; row number
MOV DL, 28H ; column number

MOV RES+2, '\$' ; \$ indicates end of the string
LEA DX, RES ; string

CALL DISP ; RES value will be printed on screen

MOV AH, 4CH
INT 21H

DISP PROC NEAR

MOV AH, 09H
INT 21H

RET

DISP ENDP

END