LAB - 3 program.

```
.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 always in AL and BL
MOV CL, 4
SHR AL, CL       ; 00H
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
```

```
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
MOV AH, 02H          ; Set the cursor position
MOV BH, 00H
MOV DH, 0CH          ; Row number
MOV DL, 28H          ; Column number

MOV RES+2, '$' ; $ here indicates end of the result string.

LEA DX, RES

CALL DISP            ; Res value will be printed on screen

MOV AH, 4CH
INT 21H
RET
DISP ENDP
DISP PROC NEAR
MOV AH, 09H
INT 21H
RET
DISP ENDP

END
```