

Vivekanand Education Society's Institute of Technology
Department of Computer Engineering



Subject: - Microprocessor

Class:-T.E. (D12)

Semester:- V

Div:- C

Roll No: 29	Name: Ajay Singh Khalsa		
Exp. No: 12	Title: Program and interfacing of ADC using 8255		
DOP:			DOS:
GRADE:	LAB OUTCOMES : LO1, LO2, LO3		SIGNATURE:

Name: Ajay Singh Khalsa

Roll No: 29

Div: D12C

Aim: Program and Interfacing of ADC using 8255.

Input:

```
DATA SEGMENT
PORTA EQU 0FFE0H
PORTC EQU 0FFE4H
CNTPTRT EQU 0FFE6H
MEM DW 2000H
DATA ENDS
CODE SEGMENT
ASSUME CS:CODE,DS:DATA
START:  MOV AX,DATA
        MOV DS,AX
        MOV DX,CNTPTRT
        MOV AL,98H OUT
        DX,AL
        MOV AL,01H
        OUT DX,AL
        MOV AL,00
        OUT DX,AL
        MOV DX,PORTC
        CHK: IN AL,DX
        AND AL,80H
        JZ CHK
        MOV DX,PORTA
        IN AL,DX
        MOV MEM,AL
        INT 3H
        CODE ENDS
        END START
```

Output:

```
C:\TASM>tasm ADC.asm
Turbo Assembler  Version 3.0  Copyright (c) 1988, 1991 Borland International

Assembling file:   ADC.asm
**Error** ADC.asm(24) Operand types do not match
Error messages:    1
Warning messages:  None
Passes:            1
Remaining memory:  476k

C:\TASM>tdlink asm
Illegal command: tdlink.

C:\TASM>tlink asm
Turbo Link  Version 2.0  Copyright (c) 1987, 1988 Borland International
asm.obj : unable to open file
```

Conclusion :

Thus in this ~~we~~ experiment we learnt about 8255 IC and its interfacing with 8086 to implement a Analog to digital signal converter.