**EXPERIMENT 9**

**9753**

**Aditya Gurav**

**To interface an Alphanumeric LCD (16\*2) to the 8051.**

ORG 00000H ;sending the command to the LCD

MOV A,#38H ;2 lines and 5x7 matrix

ACALL COMNWRT ;calling command write

ACALL DELAY ;calling delay

MOV A,#0EH ;display on and cursor blinking

ACALL COMNWRT ;calling command write

ACALL DELAY ;calling delay

MOV A,#01 ; clear display screen

ACALL COMNWRT ;calling command write

ACALL DELAY ;calling delay

MOV A,#06H ;shift cursor to right

ACALL COMNWRT ;calling command write

ACALL DELAY ;calling delay

MOV A,#84H ;

ACALL COMNWRT ;calling command write

ACALL DELAY ;calling delay

; Displaying my name

MOV A,#'A' ;sending character A

ACALL DATAWRT ;calling data write

ACALL DELAY ;calling delay

MOV A,#'D' ;sending character R

ACALL DATAWRT ;calling data write

ACALL DELAY ;calling delay

MOV A,#'I' ;sending character P

ACALL DATAWRT ;calling data write

ACALL DELAY ;calling delay

MOV A,#'T' ;sending character I

ACALL DATAWRT ;calling data write

ACALL DELAY ;calling delay

MOV A,#'Y' ;sending character T

ACALL DATAWRT ;calling data write

ACALL DELAY ;calling delay

MOV A,#'A' ;sending character A

ACALL DATAWRT ;calling data write

AGAIN: SJMP AGAIN

;sending the commands to the LCD

COMNWRT:

MOV P1,A ; moving all the commands from accumulator to port P1

CLR P2.0

CLR P2.1

SETB P2.2

ACALL DELAY

CLR P2.2

RET

;sending the data to the LCD

DATAWRT:

MOV P1,A

SETB P2.0

CLR P2.1

SETB P2.2

ACALL DELAY

CLR P2.2

RET

;delay program

DELAY: MOV R3,#50

HERE2: MOV R4,#255

HERE: DJNZ R4,HERE

DJNZ R3,HERE2

RET

END

