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1BM19CS168
Swetha. Paty
Swetha

LAB PROGRAM-5

```
.MODEL SMALL
.DATA
 STR1 DB 10 DUP(0)
 STR2 DB 10 DUP(0)
 LEN1 DB 00
 LEN2 DB 00
 MSG1 DB 0DH,0AH,"ENTER FIRST STRING$"
 MSG2 DB 0DH,0AH,"ENTER SECOND STRING$"
 MSG3 DB 0DH,0AH,"STRINGS ARE EQUAL$"
 MSG4 DB 0DH,0AH,"STRINGS ARE NOT EQUAL$"
 MSG5 DB 0DH,0AH,"LENGTH OF FIRST STRING IS$"
 MSG6 DB 0DH,0AH,"LENGTH OF SECOND STRING IS$"
 MSG7 DB 0DH,0AH,"LENGTH OF STRING IS$"

.CODE
 MOV AX,@DATA
 MOV DS,AX

 LEA DX,MSG1
 MOV AH,09H
 INT 21H

 MOV SI,00H

BACK1: MOV AH,01H
       INT 21H
       CMP AL,0DH
       JE NEXT1
       MOV STR1[SI],AL
       INC SI
       INC LEN1
       JMP BACK1
```

```
NEXT1 : LEA DX, MSG2
        MOV AH, 09H
        INT 21H
        MOV SI, 00H

BACK2 : MOV AH, 01H
        INT 21H
        CMP AL, 0DH
        JE NEXT2

        MOV STR2[SI], AL
        INC SI
        INC LEN2
        JMP BACK2

NEXT2 : MOV AL, LEN1
        CMP AL, LEN2
        JNE NOTEQUAL

        ; when length of both strings are equal
        ; i.e LEN1 = LEN2

        MOV SI, 00H
        MOV DI, 00H
        MOV CL, LEN1        ; MOV CL, LEN2

BACK3 : MOV AL, STR1[SI]
        CMP AL, STR2[DI]
        JNE NOTEQUAL
        INC SI
        INC DI          ; CLD can be used
        DEC CL
        JNZ BACK3       ; } loop BACK3 can be used

        LEA DX, MSG3
        MOV AH, 09H
        INT 21H
```

```
        LEA DX, MSG7
        MOV AH, 09H
        INT 21H

        MOV DL, LEN1      ; MOV DL, LEN2
        ADD DL, 30H
        MOV AH, 02H
        INT 21H
        JMP LAST

NOTEQUAL: LEA DX, MSG4
          MOV AH, 09H
          INT 21H

          LEA DX, MSG5
          MOV AH, 09H
          INT 21H

          MOV DL, LEN1
          ADD DL, 30H
          MOV AL, 02H
          INT 21H

          LEA DX, MSG6
          MOV AH, 09H
          INT 21H
          MOV DL, LEN2
          ADD DL, 30H
          MOV AH, 02H
          INT 21H

LAST:     MOV AH, 4CH
          INT 21H
          END
```