```
            ;NAME:: LUNGADE KIRAN SANJAY
            ;ROLL NO.:: 39
            ;BATCH:: S2
            ;TITLE:: CONVERTING BINARY NUMBER TO HEXADECIMAL NUMBER


INPUTSTR    MACRO BUFFADDR
            MOV AH,0AH
            MOV DX,OFFSET BUFFADDR
            INT 21H
            ENDM

        DISPSTR MACRO STRADDR
            MOV AH,09H
            MOV DX,OFFSET STRADDR
            INT 21H
            ENDM

DATASEG1          SEGMENT
        BINBUFF    DB 9,0
        BINARY          DB 9 DUP(0),'$'
        HEX        DB '00H','$'

        STR1 DB 10,13,'First 8-digit binary number : $'
           STR2     DB 10,13,'Equivalent hexadecimal number is: $'

DATASEG1    ENDS
CODESEG1    SEGMENT
            ASSUME DS:DATASEG1,CS:CODESEG1
        BEGIN:     MOV AX,DATASEG1
            MOV DS,AX

            DISPSTR STR1
            INPUTSTR BINBUFF
            ;CONVERT BINARY TO HEXADECIMAL

            MOV SI,OFFSET BINARY
            MOV CX,04
            MOV DL,00H
        BACK: MOV AL,[SI]
            AND AL,01H
            ROL DL,1
            OR DL,AL
            INC SI
            LOOP BACK
            ADD DL,30H
            MOV HEX,DL

            MOV CX,04
            MOV DL,00H
        BACK1:     MOV AL,[SI]
            AND AL,01H
```
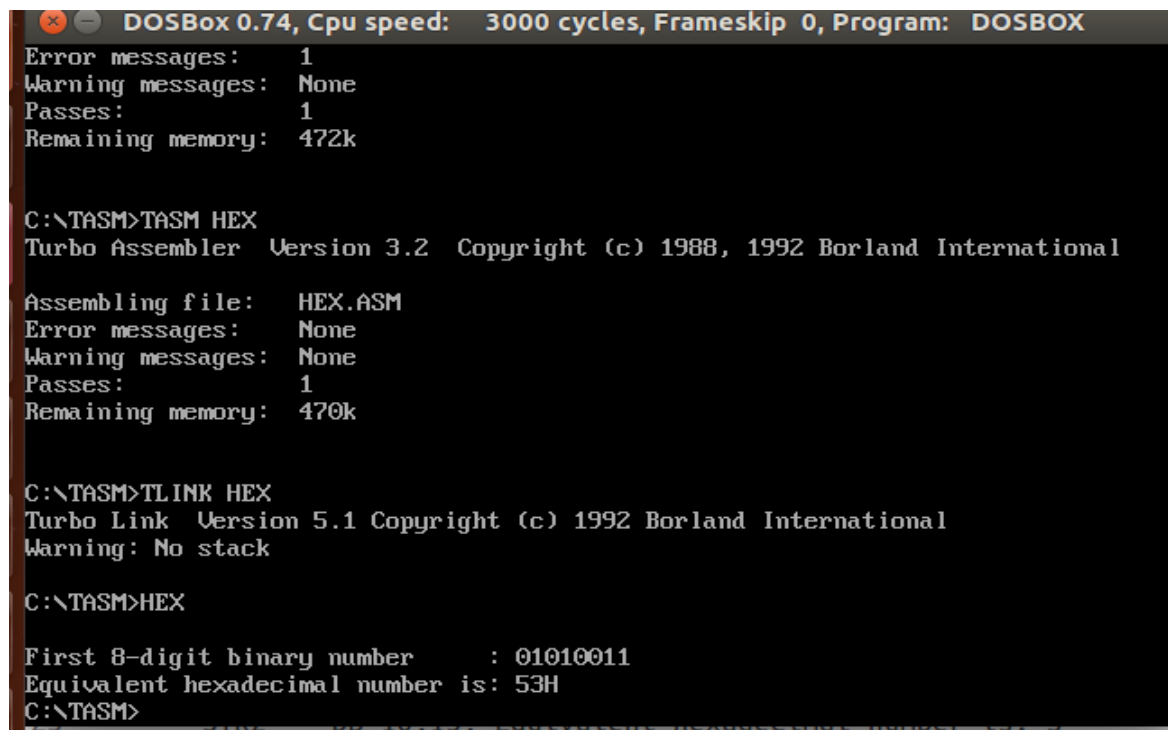
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            ROL DL,1
            OR DL,AL
            INC SI
            LOOP BACK1
            ADD DL,30H
            MOV HEX+1,DL

            DISPSTR STR2
            DISPSTR HEX

            MOV AX,4C00H
            INT 21H

CODESEG1    ENDS
            END BEGIN
```