.MODEL SMALL

.386

.DATA

NUM DW 0

MSG1 DB 10,13,'Enter 4-DIGIT ASCII number : $'

MSG2 DB 10,13,'THE BINARY NUMBER IS : $'

.CODE

.STARTUP

;First Number

MOV DX,OFFSET MSG1

MOV AH,09

INT 21H

MOV DL,10

MOV AH,02

INT 21H

MOV DX,0

MOV CX,4

L2 : MOV BX,0

MOV AH,01

INT 21H

CMP AL,39H

JBE L1

SUB AL,7

L1 : SUB AL,30H

ADD BL,AL

MOV AX,10

MUL DX

MOV DX,AX

ADD DX,BX

LOOP L2

MOV NUM,DX

MOV DL,10

MOV AH,02

INT 21H

;PRINT BINARY NUMBER

MOV DX,OFFSET MSG2

MOV AH,09

INT 21H

MOV DL,10

MOV AH,02

INT 21H

MOV BX,NUM

MOV CX,16

PN :

SHL BX,1

JC ONE

MOV DL,'0'

MOV AH,02

INT 21H

JMP TWO

ONE : MOV DL,'1'

MOV AH,02

INT 21H

TWO :

LOOP PN

.EXIT

END