ASSUME CS: CODE, DS: DATA

DATA SEGMENT

PA EQU 24A0H

PB EQU 24A1H

PC EQU 24A2H

CR EQU 24A3H

MSG DB "NO. OF 1’S:”

ONES DB ?,"$"

DATA ENDS

CODE SEGMENT

START:

MOV AX, DATA

MOV DS, AX

MOV DX, CR

MOV AL, 082H

OUT DX, AL

MOV DX, PB

IN AL, DX

MOV CX, 8

MOV AH, 00

ROT\_AGAIN:

ROR AL, 1

JNC NEXT

INC AH

LOOP ROT\_AGAIN

MOV BL, AH

ADD AH, 30H

MOV ONES, AH

LEA DX, MSG

MOV AH, 09H

INT 21H

MOV AL, 0FH

ROR BL, 1

JC DISP

MOV AL, 0F0H

DISP:

MOV DX, PA

OUT DX, AL

MOV AH, 4CH

INT 21H

CODE ENDS

END START