Program to count number of 1's and 0's in a given 8 bit number

.model small
.data
n1 db 31h
zeros db 1 dup(0)
ones db 1 dup(0)
.code
Start:
mov ax,@data
mov ds,ax
mov cl,08h
mov ah,00h
mov al,n1
mov dx,0000h

up: rcl al,01H

JC next inc dl jmp down next: inc dh down: loop up mov zeros, dh mov ones,dl int 03H end Start