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CSE

Lab Assignment 7
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TASK : Write a program to check number of 1's and 0's in given number using 8085 & verify

Code:

```
;<Program title>
jmp start
;data
;code
start: nop
MVI C,00
MVI D,00
LXI H,000CH
MOV A,M
MVI B,08
up: RLC
JNC down
INR D
JMP shift
down: INR C
shift: DCR B
JNZ up
INX H
```
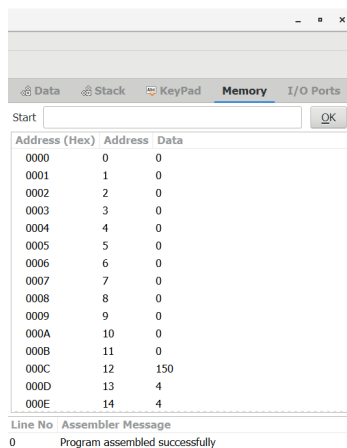
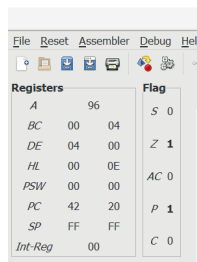MOV M,C

INX H

MOV M,D

hlt

Input:

00CH->150

Output:

00DH->4

00EH->4

Execution:

Verification: binary representation of 150 is given as : 10010110. Therefore the number of 0's in the binary representation are 4 and the number of 1's is 4. The same output is given by our program hence verifying that the program is able to successfully find the total number of ones and zeros in a given number