ANUSHKA GUPTA
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B.TECH CSE

LAB ASSIGNMENT 5

TASK : Write a Program to Move a Block of Data Using 8085 & verify

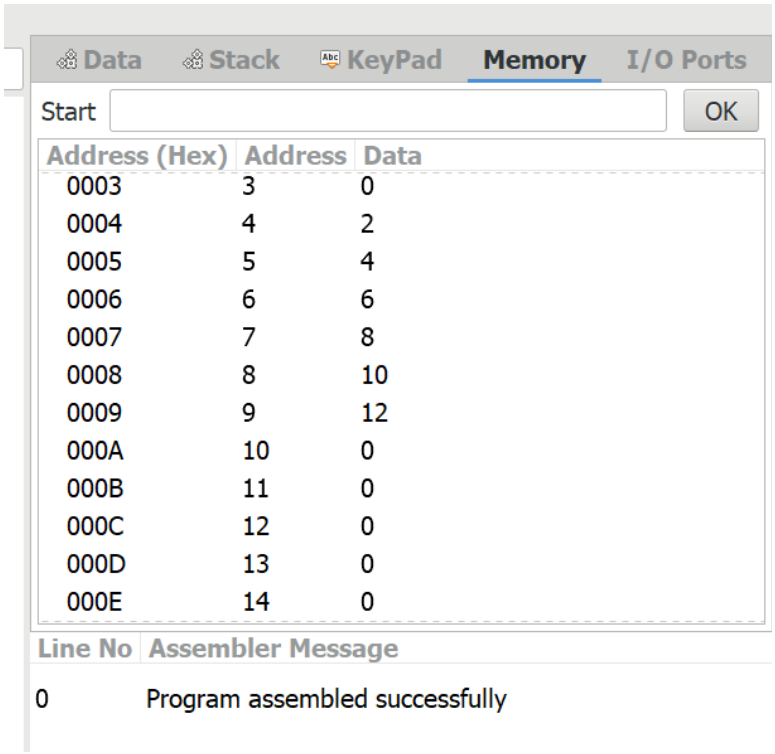
Algorithm:

1) Initialize count in C as 6. This is the size of our data block
2) Initialize H-L as source memory pointer
3) Initialize D-E as the destination memory pointer
4) While the count is not equal to zero :
    a) Get the byte from the source memory block
    b) Store the byte in the destination memory block
    c) Increment source memory pointer
    d) Increment destination memory pointer
    e) Decrement count

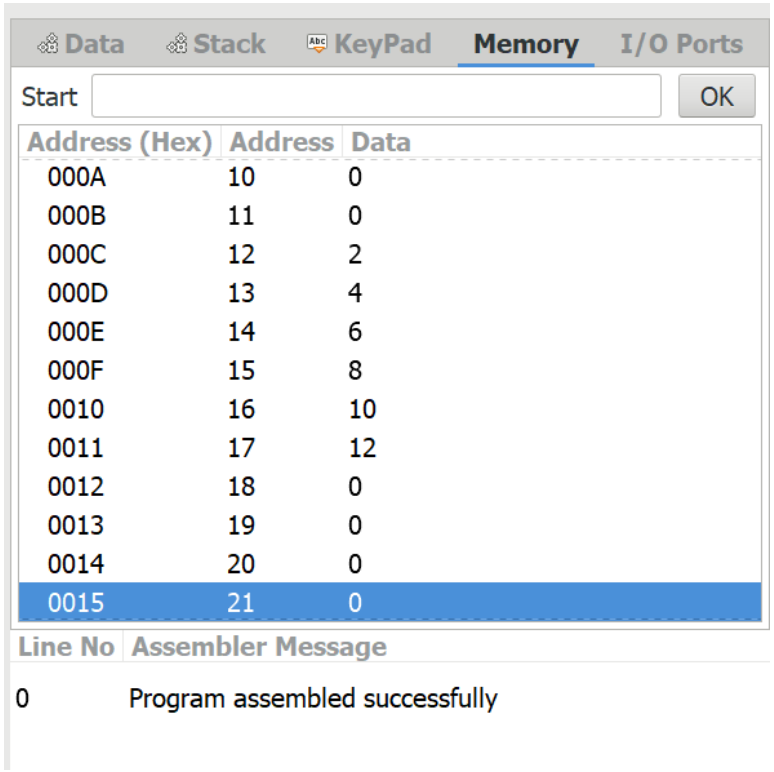
Code:

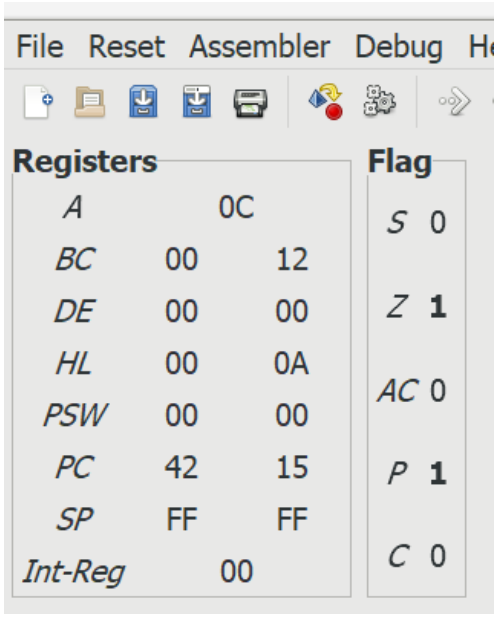
```
;<Program title>
jmp start
;data
;code
start: nop
MVI D,06
LXI H, 004H
LXI B, 00CH
up: MOV A,M
STAX  B
INX H
INX B
DCR D
JNZ up
hlt
```

Before execution:



After execution:





Input: (address in hex format)
0004 -> 2
0005 -> 4
0006 -> 6
0007 -> 8
0008 -> 10
0009 -> 12

Output: (address in hex format)
000C -> 2
000D -> 4
000E -> 6
000F -> 8
0010 -> 10
0011 -> 12

Verification: Our source address was 0004 and destination was 000C . The values stored in memory locations from 000C to 0011 are the same as the values stored in 0004 to 0009. Hence verified that moving of block data is successful.