

## PROGRAM

```

MOV CL, [2000]
DEC CL
L1: MOV SI, 8000
    MOV CH, [2000]
    DEC CH
L2: MOV AX, [SI]
    INC SI
    INC SI
    CMP AX, [SI]
    JC L3
    XCHG AX, [SI]
    DEC SI
    DEC SI
    XCHG AX, [SI]
    INC SI
    XCHG AX, [SI]
    INC SI
    INC SI
L3: DEC CH
    JNZ L2
    DEC CL
    JNZ L1
    HLT

```

Result

The above program is executed successfully and  
 result is obtained.

3r

PROGRAM

1000		MOV AL, 00%
1003	Start	MOV DL, 2000
1001		MOV CB, 04
1006		OUT CX, AL
100E		DEC BL
1010		JZ END
1012		MOV DX, 1010
1016	Delay :	DEC DX
1019		JNZ Delay
101A		INC DI
101A		Loop LOOP1
101C		JMP START
101F	END	HLT

Result

The program is executed and output is obtained.

~~Not  
possible~~

- 1a. Determine BL if BL is zero jump to
- 2a. Load DT with 1010.
- 2b. Determine DX and if DX is zero then repeat 2a
- 2c. If DX is not zero then repeat step from 17 using from
- 2d. Jump to L15.
- 2e. Jump to Step 1.

program.

1000	Step	MOV BL, 08
1003	L1	MOV DL, 2000
1007		MOV CL, 04
100A	L2	MOV AL, [DI]
100C		OUT CO, AL
100E		DEC DL
1010		JZ L3
1012		MOV DX, 1010
1016	Delay :	DEC DT
1017		JNZ Delay
1019		INC PI
101A		LOOP L2
101B		JMP LI
10F	L3:	MOV BL, 0C8
1022	L4:	MOV DI, 2003
✓ 1026		MOV CL, 04
1029	L5:	MOV AL, [DI]
102B		OUT CO, AL
102D		DEC BL

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100F  
10B3  
10B4  
10B6  
10B7  
10B9  
108C

LO :

EXIT :

MOV DX, 1010  
DEC DI  
JNC L6  
DEC DI  
LOOP LS  
JMP L4  
JMP Start

RESULT

Program is executed So o/p is obtained.

~~100F~~

25/09/26

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EXPERIMENT : II (C)  
STEPPER MOTOR (D)

AIM:

To run a Stepper motor at different speeds.

ALGORITHM:

1. Load the values in U200 to D1
2. Load CL with 04
3. Load Value of D1 to AL
4. Out AL to the port C0
5. Move 1010 to BT
6. Decrement BT
7. Jump to Step 6 if it is not B=0.
8. Judgment D1
9. Loop to Step 3
10. Jump to Step 2
11. End.

PROGRAM:

1000

L1

MOV D1, U200

1004

MOV CL, 04

1007

L2

MOV AL, (D1)

1009

OUT C0, AL

100A

Delay

MOV BT, 1010

100F

HZ

PCL BT

1d0

JNZ Delay

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1012            INC D1  
1013            LOOP L2  
1015            JNP L1  
1016            HLT

RESULT

✓ Program is executed and o/p is obtained.

~~1015~~  
~~1016~~