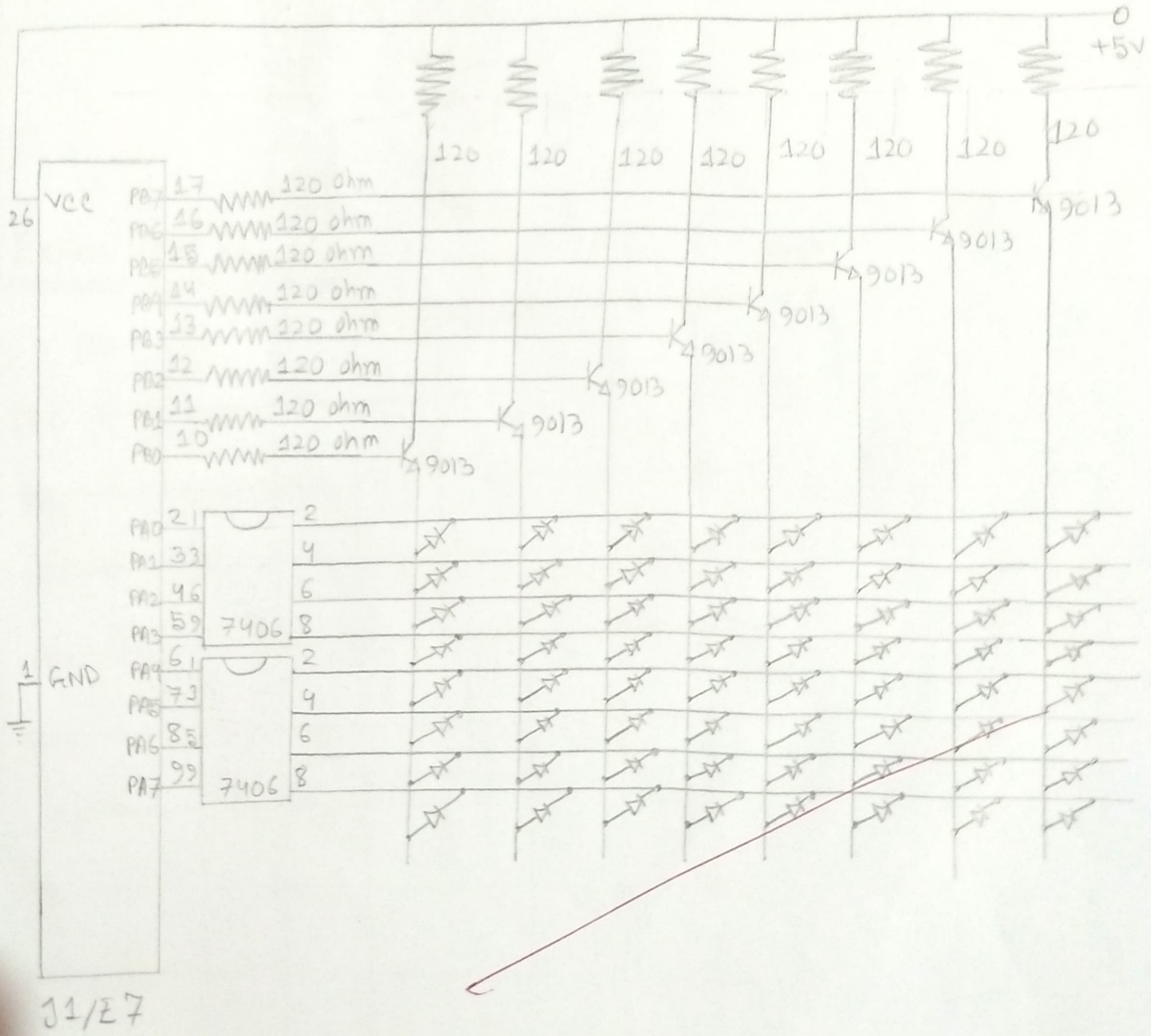
Experiment Name: Write and execute a program in a MTS-86 trainer board and Show LED MATRIX.

Apparatus: MTS-8688.C, bread board, power supply and multiplug.

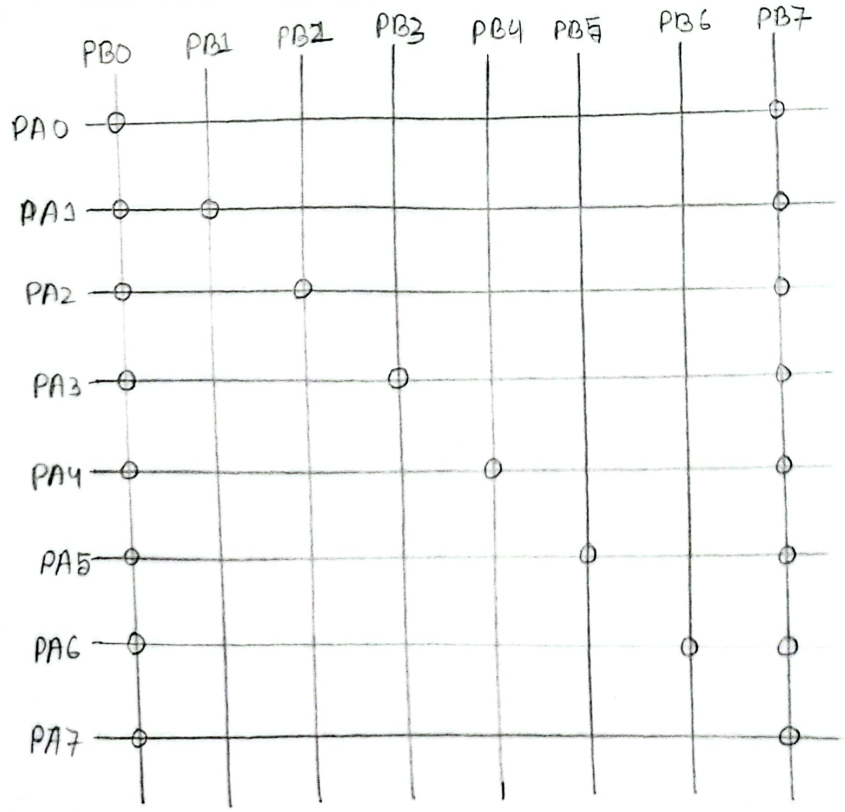
Circuit Diagram:



Source Code:

```
MOV   AL, 80
OUT   13, AL
MOV   CX, 000
MOV   AL, 0L
MOV   BX, 0500
OUT   11, AL
PUSH  AX
ADD   BX, CX
MOV   AL, [BX]
OUT   10, AL
PUSH  CX
MOV   CX, 0080
NOP
LOOP  0419
POP   CX
POP   AX
ROL   AL, 01
LOOP  0409
JMP   0404
```

Experiment Result:



PA0	PA1	PA2	PA3	PA4	PA5	PA6	PA7	
1	1	1	1	1	1	1	1	1st scan
0	1	0	0	0	0	0	0	2nd scan
0	0	1	0	0	0	0	0	3rd scan
0	0	0	1	0	0	0	0	4th scan
0	0	0	0	1	0	0	0	5th scan
0	0	0	0	0	1	0	0	6th scan
0	0	0	0	0	0	1	0	7th scan
1	1	1	1	1	1	1	1	8th scan

FF, 40, 20, 10, 08, 04, 02, FF = "N"

By obtaining the binary information we get the data FF, 40, 20, 10, 08, 04, 02, FF. After Executing the result we can see the LED Matrix display the character "N".