//3 2 1 \* 0

//7 6 5 \* 4

//11 10 9 \* 8

ORG 0

mov R0, #30H

mov SP, #60H

mov R2, #12

mov R3, #0

loop:

mov A, R3

mov @R0, A

inc R0

inc R3

djnz R2, loop

mov R0, #30H

mov R2, #4

loop\_store\_1:

mov A, @R0

push ACC

inc R0

djnz R2, loop\_store\_1

mov R0, #34H

mov R2, #4

loop\_store\_2:

mov A, @R0

push ACC

inc R0

djnz R2, loop\_store\_2

mov R0, #38H

mov R2, #4

loop\_store\_3:

mov A, @R0

push ACC

inc R0

djnz R2, loop\_store\_3

loop\_add\_new\_column:

mov 31H, #10

mov 36H, #10

mov 3BH, #10

mov R0, #3EH

mov R2, #3

loop\_restore\_3:

pop ACC

mov @R0, A

dec R0

djnz R2, loop\_restore\_3

pop ACC

mov 3AH, A

mov R0, #39H

mov R2, #3

loop\_restore\_2:

pop ACC

mov @R0, A

dec R0

djnz R2, loop\_restore\_2

pop ACC

mov 35H, A

mov R0, #34H

mov R2, #3

loop\_restore\_1:

pop ACC

mov @R0, A

dec R0

djnz R2, loop\_restore\_1

pop ACC

mov 30H, A

END

// 3 2 1 0

// \* \* \* \*

// 7 6 5 4

// 11 10 9 8

ORG 0

mov SP, #60H

mov R0, #30H

mov R2, #12

mov R3, #0

clr A

loop:

mov A, R3

mov @R0, A

inc R3

inc R0

djnz R2, loop

mov R0, #34H

mov R2, #8

loop\_store:

mov A, @R0

push ACC

inc R0

djnz R2, loop\_store

loop\_new\_insertion:

mov 34H, #10H

mov 35H, #10H

mov 36H, #10H

mov 37H, #10H

mov R0, #3FH

mov R2, #8

loop\_restore:

pop ACC

mov @R0, A

dec R0

djnz R2, loop\_restore

END