

第 1 题：冒泡排序

```
mul1.asm  mul2.asm  bubbleSort.asm  ...  jsdos12:27:57 PM  X
bubbleSort.asm > ...
1  STACK          SEGMENT      PARA STACK
2  STACK_AREA     DW           100H DUP(?)
3  STACK_BOTTOM   EQU         $ - STACK_AREA
4  STACK          ENDS
5
6
7  DATA          SEGMENT      PARA
8  TABLE_LEN     DW           16
9  TABLE         DW           200, 300, 400, 10, 20, 0, 1, 8
10                DW           41H, 40, 2037H, 3585H, 60, 0FFFFH, 2, 3
11  RESULT         DB           5 DUP(?), 20H, '$'
12  NEW_LINE       DB           0DH, 0AH, '$'
13  DATA          ENDS
14
15
16  PRINT_STR      MACRO
17      MOV        AH, 09H
18      INT        21H
19  ENDM
20
21
22  CODE           SEGMENT      PARA
23                ASSUME      CS:CODE, DS:DATA, SS:STACK
24
25
26  MAIN           PROC        FAR
27      MOV        AX, STACK
28      MOV        SS, AX
29      MOV        SP, STACK_BOTTOM
30      MOV        AX, DATA
31      MOV        DS, AX ; init SS SP DS
32
```

```
D:\>masm D:\test.asm:
Microsoft (R) MASM Compatibility Driver
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Invoking: ML.EXE /I. /Zm /c /Ta D:\test.asm

Microsoft (R) Macro Assembler Version 6.11
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Assembling: D:\test.asm

D:\>link D:\test:

Microsoft (R) Segmented Executable Linker Version 5.31.009 Jul 13 1992
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D:\>D:\test
00200 00300 00400 00010 00020 00000 00001 00008 00065 00040 08247 13701 00060 65
535 00002 00003
00000 00001 00002 00003 00008 00010 00020 00040 00060 00065 00200 00300 00400 00
247 13701 65535

D:\>{ _
```

第 2 题：乘法 1

```
mul1.asm  bubbleSort.asm  mul1.asm  ...  jsdos12:29:47 PM  X
mul1.asm > CODE1 > PRINTNUM
72      POP        SI
73      RET
74  GETNUM      ENDP
75
76  ; PRINTNUM(AX) 打印一个数的十进制形式，该数在AX中
77  PRINTNUM    PROC
78      PUSH      BX
79      PUSH      CX
80      PUSH      DX
81      PUSH      DI
82
83      MOV       CX, 5
84      MOV       DI, OFFSET RESULT+6
85      MOV       BX, 10
86  LP1:        XOR       DX, DX
87      DIV       BX
88      OR        DL, 30H
89      MOV       [DI], DL
90      DEC       DI
91      LOOP      LP1
92
93  PRINT_RES:   MOV       DX, OFFSET RESULT
94      MOV       AH, 9 ; 用完AX会变
95      INT       21H
96
97  RETURN2:     POP       DI
98      POP       DX
99      POP       CX
100     POP       BX
101     RET
102  PRINTNUM    ENDP
103
```

```
D:\>d:
D:\>set PATH=C:\MASH

D:\>masm D:\test.asm:
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Invoking: ML.EXE /I. /Zm /c /Ta D:\test.asm

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Assembling: D:\test.asm

D:\>link D:\test:

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D:\>D:\test
30 231
06930
D:\>{ _
```

第 3 题：乘法 2

(下页)

mul2.asm

CODE1 > PRINT_DEC

1

STACK1

SEGMENT

PARA STACK

2

STACK_AREA

DW

100H DUP(?)

3

STACK_BOTTOM

EQU

\$ - STACK_AREA

4

STACK1

ENDS

5

6

7

DATA1

SEGMENT

PARA

8

NUMBER1

DD

12345678H

9

NUMBER2

DD

6543ABCDH

10

ANSWER

DW

4 DUP(0)

11

DIVIDENT

DW

4 DUP(0)

12

DEC_STR

DB

19 DUP(0), '\$'

13

NEW_LINE

DB

0DH, 0AH, '\$'

14

DATA1

ENDS

15

16

17

CODE1

SEGMENT

PARA

18

ASSUME

CS:CODE1, DS:DATA1, SS:STACK1

19

20

MAIN

PROC

FAR

21

MOV

AX, STACK1

22

MOV

SS, AX

23

MOV

SP, STACK_BOTTOM

24

MOV

AX, DATA1

25

MOV

DS, AX ; INIT SS SP DS

26

27

MOV

AX, WORD PTR NUMBER1

28

MOV

BX, WORD PTR NUMBER2

29

MUL

BX

30

MOV

ANSWER, AX

31

MOV

SI, DX ; SI 暫存

32

jsdos12:30:54 PM

pause sound Worker

Z:\>d:

D:\>set PATH=C:\MASM

D:\>masm D:\test.asm:

Microsoft (R) MASM Compatibility Driver

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Invoking: ML.EXE /I. /Zm /c /Ta D:\test.asm

Microsoft (R) Macro Assembler Version 6.11

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Assembling: D:\test.asm

D:\>link D:\test:

Microsoft (R) Segmented Executable Linker Version 5.31.009 Jul 13 1992

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D:\>D:\test

0733760783136618

0518888156713674264

D:\>{