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5.14

1）未指明目的操作数的属性

2）DS作为段寄存器，不应当参加相减操作

3）不得直接使用立即数进行PUSH

4）目的操作数不得为立即数

5）两个操作数不得皆为存储单元

6）若移位次数大于1，则使用CL寄存器

5.16

37H -> 00110111

1）0F0H=11110000B, 00110111B AND 11110000B = 00110000B = **30H**

2）03H=00000011B,00110111B OR 00000011B = 00110111B = **37H**

3）NOT 00110111B = 11001000B = **C8H**

4）0FH = 00001111B,XOR AL,0FH = 00111000B = **38H**

5.17

首先把用户的程序加载进内存，接着建立程序段前缀PSP区，然后用DS和ES寄存器保存PSP区段地址，以及定义代码段。此后设置根据程序代码的段地址CS和IP，再设置堆栈区的段地址SS寄存器和堆栈指针SP;最后将控制权交给用户程序，开始执行内容。

5.22

MOV AX,0

XOR AX,AX

AND AX,0

5.26

DATAS SEGMENT

DATAS ENDS

CODES SEGMENT

ASSUME CS:CODES,DS:DATAS

START:

MOV AX,DATAS

MOV DS,AX

MOV AH,1

INT 21H

SUB AL,30H

AND AL,1

CMP AL,0

;换行

MOV AH,2

MOV DL,0AH

INT 21H

MOV DL,0DH

INT 21H

JE LET1

MOV DL,'N'

INT 21H

JMP LET2

LET1:

MOV DL,'Y'

INT 21H

LET2:

MOV AH,4CH

INT 21H

CODES ENDS

END START

5.27

DATAS SEGMENT

X DB 5

Y DB ?

DATAS ENDS

CODES SEGMENT

ASSUME CS:CODES,DS:DATAS

START:

MOV AX,DATAS

MOV DS,AX

MOV AL,X

CMP AL,0

JE LET1

JL LET2

MOV AL,X

ADD AL,3

MOV AH,0

MOV BL,2

IDIV BL

JMP LETE

LET1:

MOV AL,0

JMP LETE

LET2:

MOV AL,X

MOV CL,2

SAL AL,CL

LETE:

MOV Y,AL

MOV AH,4CH

INT 21H

CODES ENDS

END START

5.28

DATAS SEGMENT

X DB -16

Y DB 0

Z DB ?

DATAS ENDS

CODES SEGMENT

ASSUME CS:CODES,DS:DATAS

START:

MOV AX,DATAS

MOV DS,AX

MOV AH,0

MOV AL,X

CMP AL,0

JGE LET1

NEG AX

MOV Y,AL

JMP LETE

LET1:

MOV BL,4

IMUL BL

MOV AH,0

MOV BL,Y

MOV CL,16

IDIV CL

LETE:

MOV Z,AL

MOV AH,4CH

INT 21H

CODES ENDS

END START

5.29

DATAS SEGMENT

W DB 1,-1,0,2,5,-2,0,0,1,9

POSI DB 0

NEGA DB 0

ZERO DB 0

DATAS ENDS

CODES SEGMENT

ASSUME CS:CODES,DS:DATAS

START:

MOV AX,DATAS

MOV DS,AX

MOV SI,0

LET0:

CMP SI,10

JE LETE

CMP W[SI],0

JL LET1

JG LET2

INC ZERO

INC SI

JMP LET0

LET1:

INC NEGA

INC SI

JMP LET0

LET2:

INC POSI

INC SI

JMP LET0

LETE:

MOV AH,4CH

INT 21H

CODES ENDS

END START

5.30

DATAS SEGMENT

BUF DB 10 DUP(?)

DATAS ENDS

CODES SEGMENT

ASSUME CS:CODES,DS:DATAS

START:

MOV AX,DATAS

MOV DS,AX

MOV SI,0

LET0:

MOV AH,1

INT 21H

CMP AL,32 ;空格

JE LETE

MOV BUF[SI],AL

INC SI

JMP LET0

LETE:

MOV BUF[SI],'$'

LEA DX,BUF

MOV BX,SEG BUF

MOV DS,BX

MOV AH,9

INT 21H

MOV AH,4CH

INT 21H

CODES ENDS

END START