

## 计组12

姓名：邵宁录

学号： 2018202195

## 第一题

程序代码

```
MOV CX, 8
MOV SI, 200
MOV DI, 210
XXX1:
    MOV WORD PTR AX, [SI]
    MOV DL, 4
    DIV DL
    CMP AH, 0
    JNZ XXX2
    MOV WORD PTR DX, [SI]
    MOV WORD PTR [DI], DX
    INC DI
    INC DI
XXX2:
    INC SI
    INC SI
    DEC CX
    JNZ XXX1
INT 3
```

## 运行结果

**运行前:**

```

-d200
073F:0200  06 00 08 00 0C 00 1F 00-A6 00 80 00 30 00 09 00  .....0...
073F:0210  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0220  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0230  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0240  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0250  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0260  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0270  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....

```

运行后：

```

-D200
073F:0200  06 00 08 00 0C 00 1F 00-A6 00 80 00 30 00 09 00  .....0...
073F:0210  08 00 0C 00 80 00 30 00-00 00 00 00 00 00 00  .....0.....
073F:0220  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00  .....
073F:0230  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00  .....
073F:0240  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00  .....
073F:0250  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00  .....
073F:0260  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00  .....
073F:0270  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00  .....

```

## 第二题

程序代码

```

MOV CX, 4
MOV SI, 200
MOV DI, 204
ADD AL, 0
XXX:
    MOV AL, [SI]
    ADC AL, [DI]
    DAA
    MOV [SI], AL
    INC SI
    INC DI
    DEC CX
    JNZ XXX
INT 3

```

运行结果

运行前：

```

-D200
073F:0200  56 34 82 12 78 45 23 25-00 00 00 00 00 00 00 00 00  U4...xE#%.....
073F:0210  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0220  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0230  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0240  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0250  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0260  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0270  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....

```

运行后：

```

-d200
073F:0200  34 80 05 38 78 45 23 25-00 00 00 00 00 00 00 00  4...8xE#%.....
073F:0210  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0220  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0230  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0240  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0250  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0260  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0270  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....

```

### 第三题

程序代码

采用小端存放

```

MOV CX, 5
MOV SI, 204
MOV DI, 210
MOV AX, 0
XXX:
    MOV DX, A
    MUL DX
    MOV DX, 0
    MOV DL, [SI]
    SUB DL, 30
    ADD AX, DX

    DEC SI
    DEC CX
    JNZ XXX

```

```
MOV [DI], AX
INT 3
```

运行结果

运行前：

```
-d200
073F:0200  35 34 33 32 31 00 00 00-00 00 00 00 00 00 00 00  54321.....
073F:0210  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0220  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0230  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0240  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0250  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0260  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0270  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
```

运行后：

```
-d200
073F:0200  35 34 33 32 31 00 00 00-00 00 00 00 00 00 00 00  54321.....
073F:0210  39 30 00 00 00 00 00 00-00 00 00 00 00 00 00 00  90.....
073F:0220  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0230  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0240  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0250  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0260  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0270  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
```

## 第四题

程序代码

要注意确保除法不溢出

```
MOV SI, 200
MOV DI, 210
MOV WORD PTR AX, [SI]
MOV DL, A
XXX:
    DIV DL
    ADD AH, 30
    MOV [DI], AH
    MOV AH, 0
    INC DI
    CMP AL, 0
    JNZ XXX
INT 3
```

运行结果

运行前：

```
-d200
073F:0200  00 04 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0210  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0220  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0230  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0240  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0250  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0260  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
073F:0270  00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00  .....
```

运行后：

```
-D200
073F:0200  00 04 00 00 00 00 00 00 00-00 00 00 00 00 00 00 .....
073F:0210  34 32 30 31 00 00 00 00 00-00 00 00 00 00 00 00 4201.....
073F:0220  00 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 .....
073F:0230  00 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 .....
073F:0240  00 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 .....
073F:0250  00 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 .....
073F:0260  00 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 .....
073F:0270  00 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 .....
```