1. 程序源代码

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; 数据段定义

DATA SEGMENT

; IDDA DB 10 ; Student ID (GMFTBY)

; DB ? ; The count for the input character

; DB 10 DUP(?) ; The buffer for the array

IDDA DB 30 DUP(?)

DATA ENDS

; 代码段定义

CODE SEGMENT

MAIN PROC FAR

ASSUME CS:CODE,DS:DATA,ES:NOTHING

; 下3行为了正常跳出程序

PUSH DS

XOR AX,AX

PUSH AX

; 手动装入DATA到DS

MOV AX,DATA

MOV DS,AX

; 输入ID的ASCII

; MOV AH,0AH

; LEA DX,IDDA ; 保存ID

; INT 21H

MOV CX,12 ; 输入ASCII

MOV BX,0 ; 计数

; 循环输入

LOOP\_INPUT:

MOV AH,1

INT 21H

MOV [IDDA+BX],AL

INC BX

LOOP LOOP\_INPUT

; BIOS中断输出换行和回车

MOV AH,0EH

MOV AL,0DH

INT 10H

MOV AH,0EH

MOV AL,0AH

INT 10H

; 输出ID

MOV CX,12

MOV BX,0

LOOP\_OUTPUT:

MOV AH,2

MOV DL,[IDDA+BX]

INT 21H

INC BX

LOOP LOOP\_OUTPUT

; 循环移位

MOV AL,[IDDA+11] ; Get the LAST number

MOV AH,[IDDA+10]

MOV CX,11

; Right Remove

LOOP\_CHANGE:

MOV SI,CX

MOV DH,IDDA[SI-1]

MOV IDDA[SI],DH

LOOP LOOP\_CHANGE

MOV CX,11

LOOP\_CHANGE2:

MOV SI,CX

MOV DH,IDDA[SI-1]

MOV IDDA[SI],DH

LOOP LOOP\_CHANGE2

MOV IDDA,AH ; The last number place at the [IDDA]

MOV [IDDA+1],AL

; 输出换行和回车

MOV AH,0EH

MOV AL,0DH

INT 10H

MOV AH,0EH

MOV AL,0AH

INT 10H

; 输出ID

MOV CX,12

MOV BX,0

LOOP\_OUTPUT2:

MOV AH,2

MOV DL,[IDDA+BX]

INT 21H

INC BX

LOOP LOOP\_OUTPUT2

RET

MAIN ENDP

CODE ENDS

END MAIN

; 以下代码写着玩将字符转成数值输出，没有CALL到

PRINTAX PROC

MOV BX,10

OR AX,AX ; ax won't be changed , but if the ax's content is 0, jump to \_0\_

JZ \_0\_

LOOP\_P:

XOR DX,DX

DIV BX

MOV CX,AX

OR CX,DX

JZ \_E\_

PUSH DX ; push the remaining number nto the stack

CALL LOOP\_P

POP DX

ADD DL,'0' ; change the ASCII into the number

JMP \_1\_

\_0\_:

MOV DL,'0'

\_1\_:

MOV AH,2 ; print one character to the terminal

INT 21H

\_e\_:

RET

PRINTAX ENDP

CODE ENDS

END MAIN

1. 结果

