2.4实验一： 设计性   
IOY0 EQU 0600H  
A8254 EQU IOY0+00H\*2  
CON8254 EQU IOY0+03H\*2  
  
IOY1 EQU 0640H  
MY8255\_C EQU IOY1+02H\*2  
MY8255\_MODE EQU IOY1+03H\*2  
  
CODE SEGMENT  
ASSUME CS:CODE  
  
START:MOV DX,MY8255\_MODE   ;设置8255端口B方式0 输出  
MOV AL,80H  
OUT DX,AL  
MOV DX,CON8254  
MOV AL,50H  
OUT DX,AL  
MOV DX,A8254  
MOV AL,8  
OUT DX,AL  
DISPLAY1:  
MOV AL,40H       ；01000000,01通道1,00锁存当前计数值，000模式0,0二进制  
MOV DX,CON8254  
OUT DX,AL  
MOV DX,A8254  
 IN AL,DX  
 MOV BL,AL  
MOV AL,8  
SUB AL,BL  
MOV DX,MY8255\_C  ；端口C  
OUT DX,AL  
JMP DISPLAY1  
CODE ENDS  
END START  
  
实验二：设计性  
  
IOYO EQU 0600H  
A8254 EQU IOYO+00H\*2  
B8254 EQU IOYO+01H\*2  
C8254 EQU IOYO+02H\*2  
CON8254 EQU IOYO+03H\*2  
   
CODE SEMGENT  
ASSUME CS:CODE  
START:  
        MOV DX,CON8454  
MOV AL,36H ;计数器0 方式3  
OUT DX,AL  
MOV DX,A8254  
MOV AL,0E8H  
OUT DX,AL  
MOV AL,01H  
OUT DX,AL  
MOV DX,CON8254  
MOV AL,76H   ;计数器1，方式3  
OUT DX,AL  
MOV DX,B8254  
MOV AL,0E8H  
OUT DX,AL  
MOV AL,01H  
OUT DX,AL  
AA1：  JMP AA1  
CODE   ENDS  
END STRAT  
  
实验四：设计性  
IOY0 EQU 0600H  
MY8254\_0 EQU IOY0+00H\*2  
MY8254\_1 EQU IOY0+01H\*2  
MY8254\_2 EQU IOY0+02H\*2  
MY8254\_MODE EQU IOY0+03H\*2  
  
IOY1 EQU 0640H  
MY8255\_A EQU IOY1+00H\*2  
MY8255\_C EQU IOY1+02H\*2  
MY8255\_MODE EQU IOY1+03H\*2  
  
DATA SEGMENT  
  
FREQ\_LIST DW 175,196,221,240,262,294,330,350,393,441,495,525,589,661,700,786  
DB 3FH,06H,5BH,4FH,66H,6DH,7DH,07H,7FH,6FH,77H,7CH,39H,5EH,79H,71H  
DATA ENDS  
  
CODE SEGMENT  
ASSUME CS:CODE,DS:DATA  
START: MOV AX,DATA  
MOV DS,AX  
MOV DX,MY8255\_MODE  
MOV AL,81H  ；8255控制字  
OUT DX,AL  
  
MOV DX,MY8254\_MODE  
MOV AL,36H   ；定时器0，工作方式3  
OUT DX,AL     
                                                                                                                                                                                     
BEGIN: CALL CCSCAN  
JNZ INK2  
JMP BEGIN  
INK2: MOV CH,0FEH  ；确定按下键的位置  
MOV CL,00H  
COLUM: MOV AL,CH  
MOV DX,MY8255\_A  
OUT DX,AL  
MOV DX,MY8255\_C  
IN AL,DX  
L1: TEST AL,01H  
JNZ L2  
MOV AL,00H  
JMP KCODE  
L2: TEST AL,02H  
JNZ L3  
MOV AL,04H  
JMP KCODE  
L3: TEST AL,04H  
JNZ L4  
MOV AL,08H  
JMP KCODE  
L4: TEST AL,08H  
JNZ NEXT  
MOV AL,0CH  
KCODE: ADD AL,CL  
CALL SING  
PUSH AX  
KON: CALL CCSCAN  
JNZ KON  
POP AX  
NEXT: INC CL  
MOV AL,CH  
TEST AL,08H  
JZ KERR  
ROL AL,1  
MOV CH,AL  
JMP COLUM  
KERR: JMP BEGIN  
  
CCSCAN: MOV AL,00H  ；键盘扫描子程序  
MOV DX,MY8255\_A  
OUT DX,AL  
MOV DX,MY8255\_C  
IN AL,DX  
NOT AL  
  AND AL,0FH     
  RET        
                                                                                                                                   
SING: MOV SI,OFFSET FREQ\_LIST  
MOV AH,0   ；锁存计数器0当前值  
ADD SI,AX   
ADD SI,AX   
MOV DX,0FH   
MOV AX,4240H   
DIV WORD PTR [SI]  
MOV DX,MY8254\_0  
OUT DX,AL  
MOV AL,AH  
OUT DX,AL  
MOV DL,1  
CALL DALLY  
RET  
DALLY PROC       ；延时子程序  
D0: MOV CX,0010H  
D1: MOV AX,00F0H  
D2: DEC AX  
JNZ D2  
LOOP D1  
DEC DL  
JNZ D0  
RET  
DALLY ENDP   
CODE ENDS  
END START