.MODEL SMALL

.STACK 100

.DATA

.CODE

;\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_SLEEP\_PROC PROCEDURE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

SLEEP\_PROC proc

MOV BP,20000

MOV SI,20000

DELAY:

DEC bp

NOP

JNZ DELAY

DEC si

CMP si, 0

JNZ DELAY

RET

SLEEP\_PROC endp

;\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_END OF SLEEP\_PROC PROCEDURE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

;\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_PRINT ASCII TO SCREEN\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PRINT\_DIGIT\_TO\_SCREEN proc

PUSH AX ;STORE DL

MOV AH,02h

XOR DH,DH ;RESTORE DH

ADD DL,30h ;CONVERT DATA TO ASCII

INT 21h

POP AX

ret

PRINT\_DIGIT\_TO\_SCREEN endp

;\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_END OF PRINT ASCII TO SCREEN\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

;\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_PRINT DIGITS TO LCD\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PRINT\_DIGITS\_TO\_LCD proc

MOV AL, BL ;INCREMENTED NUMBER IS BL MOVED AL

XOR AH, AH

MOV CL,0Ah

DIV CL ;AL QUOT (FIRST DIGIT) - AH REMAINDER (SECOND DIGIT)

PUSH DX ;STORE VALUES

XCHG AL, AH ;SWAP NUMBERS

;AH (FIRST DIGIT) - AL (SECOND DIGIT) NOW

SHL AH,1 ;BUILD FIRST DIGIT WITH (XXXX 0000)

SHL AH,1

SHL AH,1

SHL AH,1

OR AL, AH ;BUILD NUMBER (ADD FIRST DIGIT TO AL)

MOV DX,0378h ;CALL SEND DATA TO LCD SERVICE

OUT DX, AL ;SEND DATA TO LCD

;\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*BUILD NUMBER AGAIN OLD VERSION\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

POP DX ;GET VALUES

XCHG AL,AH ;REVERSE NORMAL FORM

;\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_PRINT TO SCREEN SECTION\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

MOV DL, AL ;GET QUOTIEND

call PRINT\_DIGIT\_TO\_SCREEN ;SEND DATA TO PROC

MOV DL, AH ;GET REMAINDER

call PRINT\_DIGIT\_TO\_SCREEN ;SEND DATA TO PROC

RET

PRINT\_DIGITS\_TO\_LCD endp

;\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_END OF PRINT DIGITS TO LCD\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

MAIN:;\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ PROLOGUE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

MOV AX,@DATA ;DATA SEGMENT INITIALIZATION

MOV DS, AX

XOR BX, BX ;INTIALIZE THE REGISTER ( BX = 0H )

MAIN\_L1:

call SLEEP\_PROC ;CALL SLEEP\_PROC

call PRINT\_DIGITS\_TO\_LCD ;PRINT LCD

INC BL ;PREPARE NEW NUMBER

CMP BL,64h ;COMPARE WITH 100

JNZ MAIN\_L1

XOR BX, BX ;IF NUMBER 100 THEN RESET TO 0

JMP MAIN\_L1 ;RETURN MAIN PROC

;\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ EPILOGUE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

MOV AH,4CH ; MSDOS terminate service code

INT 21H ; DOS interrupt

END MAIN