2 编写程序，利用公式：N2=1+3+5+ …… +（2N-1）计算N2的值，假设N=23。

.386

DATA SEGMENT USE16

N DW 23

SQUARE DW ?

DATA ENDS

CODE SEGMENT USE16

ASSUME CS: CODE, DS: DATA

START: MOV AX, DATA

MOV DS, AX

MOV CX, N

XOR AX, AX

MOV BX, 1

ONE: ADD AX, BX

ADD BX, 2

LOOP ONE

MOV SQUARE, AX

MOV AH, 4CH

INT 21H

CODE ENDS

END START

3 编写程序，从键盘上输入一行明文，按照第一次上机实验3的规则翻译成密文，向显示器输出。

答： DATA SEGMENT

MESS DB 0DH, 0AH, “Input some text please : $”

OUTMESS DB 0DH, 0AH, ‘The text after convert :’

BUFFER DB 81, ?, 81 DUP(?)

DATA ENDS

CODE SEGMENT

ASSUME CS: CODE, DS: DATA

START:

MOV AX, DATA

MOV DS, AX

LEA DX, MESS

MOV AH, 09H

INT 21H

LEA DX, BUFFER

MOV AH, 0AH

INT 21H

MOV CL, BUFFER+1

MOV CH, 0

LEA BX, BUFFER+2

NEXT: MOV AL, [BX]

ADD AL, 11H

MOV [BX], AL

INC BX

LOOP NEXT

MOV BYTE PTR[BX], ‘$’

MOV WORD PTR BUFFER, 2020H ；缓冲区前2字节改为空格

LEA DX, OUTMESS

MOV AH, 09H

INT 21H

MOV AH, 4CH

INT 21H

CODE ENDS

END START

1数组LIST1内存有20个非压缩BCD码表示的单字节十进制数，写出完整程序，求这20个BCD数之和，结果（非压缩BCD码）存入SUM1双字单元。

.386

CODE SEGMENT USE16

ASSUME CS: CODE

LIST1 DB ‘6705762998’

DB ‘4322687310’

SUM1 DD ?

START: XOR AX, AX

MOV CX, 20

LEA BX, LIST1

ONE: ADD AL, CS:[BX]

AAA

INC BX

LOOP ONE

MOV BYTE PTR SUM1, AL ；保存个位

MOV AL, AH

MOV AH, 0 ；百十位放入AX

AAM

MOV WORD PTR SUM1+1, AX

MOV BYTE PTR SUM1+3, 0 ；千位清零

MOV AX, 4C00H

INT 21H

CODE ENDS

END START

1. 无符号数变量X用DD定义，编写程序，用十六进制格式输出变量X的值。

.386

DATA SEGEMNT USE16

X DD 36895471

MESS DB 0DH, 0AH, ‘The X in hexdecimal is : $’

HEXTAB DB ‘0123456789ABCDEF’

DATA ENDS

CODE SEGMENT USE16

ASSUME CS: CODE, DS: DATA

START:

MOV AX, DATA

MOV DS, AX

LEA DX, MESS

MOV AH, 09H

INT 21H

MOV EAX, X

MOV CX, 8

LEA BX, HEXTAB

AGAIN: ROL EAX, 4

AND AL, 0FH

XLAT

MOV DL, AL

MOV AH, 2

INT 21H

LOOP AGAIN

MOV AH, 4CH

INT 21H

CODE ENDS

END START