

```
.MODEL SMALL
.STACK 200

.DATA

N1 DB "7811"
N2 DB "3462"

ADD_RESULT DB 5 DUP(?),10,13,'$'
SUB_RESULT DB 4 DUP(?),10,13,'$'
SUB_ERROR DB "N1 < N2$"

N DB "3698"
MULT DB "4"
DIVI DB "7"

MUL_RESULT DB 5 DUP(?),10,13,'$'
DIV_RESULT DB 4 DUP(?),10,13,'$'

.CODE
MAIN PROC FAR

MOV AX,@DATA
MOV DS,AX

;ADD_RESULT<- N1 + N2

MOV CX,4
MOV SI,3
CLC

AGAIN1:
MOV AH,0
MOV AL,N1[SI]
ADC AL,N2[SI]
AAA
MOV ADD_RESULT[SI+1],AL
DEC SI
LOOP AGAIN1

MOV ADD_RESULT[0],AH

MOV CX,5
MOV SI,0

NEXT1:
ADD ADD_RESULT[SI],48
INC SI
LOOP NEXT1

MOV AH,09H
LEA DX,ADD_RESULT
INT 21H
```

```
;SUB_RESULT <= N1 - N2

MOV CX,4
MOV SI,3
CLC

AGAIN2:
MOV AH,01
MOV AL,N1[SI]
SBB AL,N2[SI]
AAS
MOV SUB_RESULT[SI],AL
DEC SI
LOOP AGAIN2

CMP AH,0
JNE DISPLAY

MOV AH,09
LEA DX,SUB_ERROR
INT 21H

DISPLAY:
MOV CX,4
MOV SI,0

NEXT2:
ADD SUB_RESULT[SI],48
INC SI
LOOP NEXT2

MOV AH,09H
LEA DX,SUB_RESULT
INT 21H

;////////////////////////////////////
;MUL_RESULT <= N * MULT

MOV CX,4
MOV SI,3
SUB MULT,48

AGAIN3:
MOV AH,0
MOV AL,N[SI]
SUB AL,48
MUL MULT
AAM
ADC AL,MUL_RESULT[SI+1]
AAA
MOV MUL_RESULT[SI+1],AL
MOV MUL_RESULT[SI],AH
DEC SI
LOOP AGAIN3
```

```
MOV CX,5
MOV SI,0

NEXT3:
ADD MUL_RESULT[SI],48
INC SI
LOOP NEXT3

MOV AH,09H
LEA DX,MUL_RESULT
INT 21H

;////////////////////////////////////
;DIV_RESULT <= N / DIVI

MOV AH,0
MOV SI,0
MOV CX,4
SUB DIVI,48

AGAIN4:
MOV AL,N[SI]
SUB AL,48
AAD
DIV DIVI
MOV DIV_RESULT[SI],AL
INC SI
LOOP AGAIN4

MOV CX,4
MOV SI,0

NEXT4:
ADD DIV_RESULT[SI],48
INC SI
LOOP NEXT4

MOV AH,09H
LEA DX,DIV_RESULT
INT 21H

.EXIT

MAIN ENDP
END MAIN
```