

```
.MODEL SMALL
.STACK 100H
.DATA
STRING1 DB 'TAKE TWO INPUTS $'
STRING2 DB ' AND $'

STRING3 DB 10,13, '1.ADD$'
STRING4 DB 10,13, '2.SUB$'
STRING5 DB 10,13, '3.MUL$'
STRING6 DB 10,13, '4.DIV $'
STRING7 DB 10,13,'RESULT $'
STR DB '-$'
STRING8 DB 10,13, 'Q $'
STRING9 DB 10,13, 'R $'
.CODE
MAIN PROC
    MOV AX,@DATA
    MOV DS,AX

    MOV AH,09
    LEA DX,STRING1
    INT 21H

    MOV AH,1
    INT 21H
    MOV BL,AL

    MOV AH,09
    LEA DX,STRING2
    INT 21H

    MOV AH,1
    INT 21H
    MOV BH,AL

    MOV AH,09
    LEA DX,STRING3
    INT 21H

    LEA DX,STRING4
    INT 21H

    LEA DX,STRING5
    INT 21H
```

```
LEA DX,STRING6  
INT 21H
```

```
MOV AH,01  
INT 21H
```

```
CMP AL,31H  
JE A1
```

```
CMP AL,32H  
JE A2
```

```
CMP AL,33H  
JE A3
```

```
CMP AL,34H  
JE A4
```

```
A1:  
CALL ROKON  
JMP EXIT
```

```
A2:  
CALL SHANTO  
JMP EXIT
```

```
A3:  
CALL EFAZ  
JMP EXIT
```

```
A4:  
CALL PRANTO  
JMP EXIT
```

```
EXIT:  
MOV AX,4CH  
INT 21H
```

```
MAIN ENDP
```

```
ROKON PROC
```

```
MOV AH,09
LEA DX,STRING7
INT 21H
```

```
SUB BL,30H
SUB BH,30H
ADD BL,BH
MOV AL,BL
MOV AH,0H
MOV BL,0AH
DIV BL
```

```
MOV BH,AH
MOV BL,AL
ADD BH,30H
ADD BL,30H
```

```
MOV AH,2
MOV DL,BL
INT 21H
MOV AH,2
MOV DL,BH
INT 21H
```

```
RET
ROKON ENDP
```

```
SHANTO PROC
```

```
MOV AH,09
LEA DX,STRING7
INT 21H
```

```
SUB BL,30H
SUB BH,30H
```

```
CMP BL,BH
JAE TOP
```

```
SUB BH,BL
MOV CL,BH
```

```
ADD CL,30H
```

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

```
MOV AH,2
MOV DL,CL
INT 21H
```

```
JMP FINISH
```

```
TOP:
SUB BL,BH
MOV CL,BL
```

```
ADD CL,30H
```

```
MOV AH,2
MOV DL,CL
INT 21H
```

```
FINISH:
RET
```

```
SHANTO ENDP
```

```
EFAZ PROC
```

```
MOV AH,09
LEA DX,STRING7
INT 21H
```

```
SUB BL,30H
SUB BH,30H
```

```
MOV AL,BL
MOV BL,BH
MUL BL
```

```
MOV AH,0H
MOV BL,0AH
DIV BL
```

```
MOV BH,AH
MOV BL,AL
ADD BH,30H
ADD BL,30H
```

```
MOV AH,2
MOV DL,BL
INT 21H
MOV DL,BH
INT 21H
RET
```

```
EFAZ ENDP
```

```
PRANTO PROC
```

```
MOV AH,09
LEA DX,STRING7
INT 21H
```

```
SUB BL,30H
SUB BH,30H
MOV AL,BL
MOV AH,0H
MOV AL,BL
MOV BL,BH
DIV BL
```

```
MOV BH,AH
MOV BL,AL
ADD BH,30H
ADD BL,30H
```

```
MOV AH,09
LEA DX,STRING8
INT 21H
```

```
MOV AH,02
MOV DL,BL
INT 21H
```

```
MOV AH,09
LEA DX,STRING9
INT 21H
    MOV AH,02
MOV DL,BH
INT 21H
RET
```

```
PRANTO ENDP
END MAIN
```

LAST LAB

```
.MODEL SMALL
.STACK 100H
.DATA
.CODE
MAIN PROC
```

```
MOV CX,5
MOV SI,0010H
ROKON:
MOV AH,1
INT 21H
MOV [SI],AL
INC SI
LOOP ROKON
```

```
MOV CX,5
MOV SI,0010H
```

```
MIM:
MOV AH,2
MOV DL,0AH
INT 21H
```

```
MOV AH,2
MOV DL,0DH
INT 21H
```

```
MOV AH,2
MOV DL,[SI]
```

```
INC SI
INT 21H
LOOP MIM
MAIN ENDP
END MAIN
```

UPPER LOWER:

```
.MODEL SMALL
.STACK 100
.DATA
```

```
.CODE
MAIN PROC
```

```
MOV SI,0100H
MOV CL,5
LABEL:
MOV AH,1
INT 21H
```

```
CMP AL,41H
JAE LOWER
JMP FINISH
```

```
LOWER:
CMP AL,5AH
JBE LOW1
```

```
CMP AL,61H
JAE UPPER
```

```
JMP FINISH
```

```
LOW1:
ADD AL,20H
JMP FINISH
```

```
UPPER:
```

```
CMP AL,7AH
JBE UP1
```

```
JMP FINISH
```

```
        UP1:
            SUB AL,20H
        FINISH:

        MOV [SI],AL
        INC SI
        LOOP LABEL

        MOV SI,0100H
        MOV CL,5
        LABEL2:
            MOV AH,2
            MOV DL,0AH
            INT 21H

            MOV DL,0DH
            INT 21H

            MOV AH,2
            MOV DL,[SI]
            INT 21H

            INC SI
            LOOP LABEL2

        MAIN ENDP
    END MAIN
```