

ASSEMBLY CODE:

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.MODEL SMALL
.STACK 100H
.DATA
    MSGA DB 'Hashmats Soldier: $'
    MSGB DB 'Opponents Soldier: $'
    MSGC DB 'Result: $'
    MSGD DB 13,10,'$'
    COUNT DB ?
    HS DW ?
    OS DW ?
    RESULT DW ?
    TEMP DW ?

.CODE
MAIN PROC
    MOV AX,@DATA
    MOV DS,AX

RAND_IO:
    MOV COUNT,2
    LEA DX,MSGA                ;Print Hashmat soldier'
    MOV AH,9
    INT 21H

GET_INPUTS:
    MOV DX,0
    MOV BX,0                ;Clear bx
    MOV AH,1
    INT 21H

    CMP AL,0DH
    JE END_INPUTS            ;If enter

    CONVERT_TO_NUM:
        AND AX,000FH        ;Use full 16 bits of AX
        MOV TEMP,AX
        MOV AX,10
        MUL BX
        MOV BX,AX
        ADD BX,TEMP

    MOV AH,1                ;Input new digit
    INT 21H
    CMP AL,0DH
    JNE CONVERT_TO_NUM

    END_INPUTS:
        CMP COUNT,1
        JNE GET_HS

        MOV OS,BX            ;Get Time
        JMP GET_OS

    GET_HS:
        MOV HS,BX            ;Get Hasmat Solders
        LEA DX,MSGB          ;Print 'Opponents Soldier:'
        MOV AH,9
        INT 21H

    GET_OS:
        DEC COUNT
        CMP COUNT,0
        JNE GET_INPUTS

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GET_RESULT:
    MOV BX, HS
    MOV AX, OS
    CMP BX, OS
    JGE FIRST_CON
    JMP SECOND_CON

FIRST_CON:
    SUB BX, OS
    MOV RESULT, BX
    JMP START_PRINT

SECOND_CON:
    SUB AX, HS
    MOV RESULT, AX

START_PRINT:
    LEA DX, MSGC                ;Print result
    MOV AH, 9
    INT 21H

    MOV AX, RESULT
    MOV CX, 0
    MOV BX, 10

STOR_RESULTS:                  ;stor each digits in stack
    XOR DX, DX
    DIV BX
    PUSH DX
    INC CX
    CMP AX, 0
    JNE STOR_RESULTS

PRINT_RESULTS:                 ;print each digits from stack
    MOV AH, 2
    POP DX
    ADD DL, 48
    INT 21H
    LOOP PRINT_RESULTS

NEW_INPUT:
    LEA DX, MSGD
    MOV AH, 9
    INT 21H
    JMP RAND_IO

MAIN ENDP
END MAIN
```