```
.MODEL SMALL
.STACK 100H
.DATA
    MSGA DB 'Input: $'
    MSGB DB 'Output: $'
    MSGC DB 13,10,'$'
    INPUT DW ?
    OUTPUT DW ?
    TEMP DW ?
.CODE
MAIN PROC
    MOV AX, @DATA
    MOV DS, AX
RAND_IO:
    LEA DX, MSGA
    MOV AH, 9
    INT 21H
    GET_INPUTS:
        MOV DX, 0
        MOV BX, 0
        MOV AH, 1
        INT 21H
        CMP AL, ODH
        JE END_INPUTS
        CONVERT_TO_NUM:
            AND AX,000FH
            MOV TEMP, AX
            MOV AX, 10
            MUL BX
            MOV BX, AX
            ADD BX, TEMP
        MOV AH, 1
        INT 21H
        CMP AL, ODH
        JNE CONVERT_TO_NUM
        END_INPUTS:
            MOV INPUT, BX
    START_PRINT:
        LEA DX, MSGB
        MOV AH, 9
        INT 21H
        MOV AX, INPUT
        MOV CX, 0
        MOV BX, 10
        STOR_RESULTS:
            XOR DX, DX
            DIV BX
            PUSH DX
             INC CX
             CMP AX, 0
             JNE STOR_RESULTS
        PRINT_RESULTS:
            MOV AH, 2
            POP DX
             ADD DL, 48
```

```
INT 21H
LOOP PRINT_RESULTS

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

MAIN ENDP
END MAIN
```