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; Author: Gabriel Choi
; Assignment Title: Sum of Two
; Assignment Description: This program will prompt the user for two integers
;                        sum them together, outputting the sum to the screen
;
; Due Date: 02-17-2023
; Date Created: 02-16-2023
; Date Last Modified: 02-17-2023
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.586
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.MODEL FLAT
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INCLUDE io.h ; header file for input/output
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.STACK 4096
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.DATA
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```
prompt1 BYTE "Enter first number", 0
prompt2 BYTE "Enter second number", 0
prompt3 BYTE "Enter third number", 0
string BYTE 40 DUP (?)
resultLbl BYTE "The sum is", 0
sum BYTE 11 DUP (?), 0
```

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.CODE
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```
_MainProc PROC
    input prompt1, string, 40 ; read ASCII characters
    atod string ; convert to integer
    mov ebx, eax ; store in memory

    input prompt2, string, 40 ; read ASCII characters
    atod string ; convert to integer
    add eax, ebx ; add 1st integer to second integer
    mov ebx, eax ; store in memory

    input prompt3, string, 40 ; read ASCII characters
    atod string ; convert to integer
    add eax, ebx ; add 3rd integer to value in eax

    dtoa sum, eax ; convert to ASCII characters
    output resultLbl, sum ; output label and sum

    sub eax, eax ; exit with return code 0
    ret ; return to calling code
_MainProc ENDP
END ; end of source code
```