```
; Author:                 Gabriel Choi
; Assignment Title:        Subtract Two Values
; Assignment Description:  This program will prompt the user for two integers
;                          subtract them, outputting the difference to the screen
; Due Date:                02-17-2023
; Date Created:            02-16-2023
; Date Last Modified:      02-17-2023


        .586
        .MODEL FLAT

        INCLUDE io.h              ; header file for input/output

        .STACK 4096

        .DATA
prompt1 BYTE    "Enter first number", 0
prompt2 BYTE    "Enter second number", 0
string  BYTE    40 DUP (?)
resultLbl BYTE  "The difference is", 0
diff      BYTE   11 DUP (?), 0

        .CODE
_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
        sub     eax, ebx                        ; subs 1st integer to second
integer
            mov     eax, eax                    ; store in memory


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

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