

```
;Programmr:   Brandon Buchanan
;Program:     proj2bwb.exe
;Course:      CSCI 2160-201
;Assignment:   Project 2
;Date:        October 27, 2011
;Purpose:
;
;   Display an introduction to the user.  Accept strings and numbers
;   from the user, but the user will have a maximum
;   number of characters that can be input from the keyboard.
;   The numbers that the user enters can be signed or not and does
;   not include leading zeros.
```

87

Brandon, there was nothing in the dropbox - I do not have code to assemble and test - so I cannot give you a grade on this project.

```
.486
.model flat
.stack 100h
ExitProcess PROTO NEAR32 stdcall, dwExitCode:DWORD
extern ascint:Near32, intasc:Near32, getchar:Near32,
getcharecho:Near32, putchar:Near32
```

```
.data
```

→ these are not in

can utility 201105.obj
how did you link! -3

```
;Prompts
strIntroPrompt    BYTE    "My name is Brandon Buchanan. ",0
;Introduction prompt
strIntroNamePrompt BYTE    "What is yours (less than 20 characters)? ",0 ;User's
name prompt
strEnteredPrompt  BYTE    "You entered the string: ",0 ;String
entered prompts
strGreetingPrompt BYTE    "Hello and good day, ",0 ;Greeting
prompt
strPeriod         BYTE    ". ",0 ;Period

strTypeStrPrompt10 BYTE    "Type a maximum of 10 characters and press ENTER: ",0
;Max 10 character prompt
strTypeStrPrompt15 BYTE    "Type a maximum of 15 characters and press ENTER: ",0
;Max 15 character prompt
strTypeStrPrompt20 BYTE    "Type a maximum of 20 characters and press ENTER: ",0
;Max 20 character prompt

strTypeNumPrompt5  BYTE    "Enter a max of 5 numeric characters and press ENTER: ",0
;Max 5 num prompt
strTypeNumPrompt10 BYTE    "Enter a max of 10 numeric characters and press ENTER: ",0
;Max 10 num prompt

CRLF              BYTE    10,13,0 ;Carriage
line return feed

;Constants
RETURN equ 13 ;ASCII decimal value for enter key
BACKSPACE equ 8 ;ASCII decimal value for backspace
SPACE equ 32 ;ASCII decimal value for space
ZERO equ 30h ;ASCII decimal value for zero
```

backspace I wrote over the prompt - 10


```

ONE equ 31h                ;ASCII decimal value for one
TWO equ 32h                ;ASCII decimal value for zero
THREE equ 33h              ;ASCII decimal value for one
FOUR equ 34h               ;ASCII decimal value for zero
FIVE equ 35h               ;ASCII decimal value for one
SIX equ 36h                ;ASCII decimal value for zero
SEVEN equ 37h              ;ASCII decimal value for one
EIGHT equ 38h              ;ASCII decimal value for zero
NINE equ 39h               ;ASCII decimal value for one
PLUS equ 2Bh
MINUS equ 2Dh

```

```

;Variables

```

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strInput          BYTE    81 dup(?)                ;Input data from the keyboard

```

```

.code

```

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_start:

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;Main program

```

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main PROC

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```

MAXCHAR5 equ 5             ;constant for 5
MAXCHAR10 equ 10           ;constant for 10
MAXCHAR15 equ 15           ;constant for 15
MAXCHAR20 equ 20           ;constant for 20

```

```

call displayIntro          ;display introduction

```

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;-----
;  Display and get info
;    for 10 characters
;-----

```

```

                                ;allow up to 10 characters and
push offset strTypeStrPrompt10 ; display the max 10 chars message
call putstring                 ;display string input code
add esp,6                      ;clean up the stack

```

```

push word ptr MAXCHAR10        ;only allow 10 characters max
push offset strInput           ;string's address to store in
call getstring                 ;display the input string
add esp,6                      ;clean up the stack

```

```

push offset CRLF               ;CRLF's address
call putstring                 ;display CRLF
add esp,4                      ;clean up the stack

```

```

push offset strEnteredPrompt   ;pass string's address to display
call putstring                 ;display entered string prompt
add esp,4                      ;clean up the stack

```

```

push offset strInput           ;pass string's address to display

```



```
call putstring          ;display entered string
add esp,4               ;clean up the stack

push offset CRLF        ;CRLF's address
call putstring          ;display CRLF
add esp,4               ;clean up the stack

push offset CRLF        ;CRLF's address
call putstring          ;display CRLF
add esp,4               ;clean up the stack

;-----
;  Display and get info
;    for 15 characters
;-----

push offset strTypeStrPrompt15 ;allow up to 15 characters and
call putstring              ; display the max 15 chars message
add esp,4                   ;display string input code
                             ;clean up the stack

push word ptr MAXCHAR15     ;only allow 15 characters max
push offset strInput        ;string's address to store in
call getstring              ;display a string
add esp,6                   ;clean up the stack

push offset CRLF           ;CRLF's address
call putstring             ;display CRLF
add esp,4                   ;clean up the stack

push offset strEnteredPrompt ;pass string's address to display
call putstring             ;display entered string prompt
add esp,4                   ;clean up the stack

push offset strInput        ;pass string's address to display
call putstring             ;display entered string
add esp,4                   ;clean up the stack

push offset CRLF           ;CRLF's address
call putstring             ;display CRLF
add esp,4                   ;clean up the stack

push offset CRLF           ;CRLF's address
call putstring             ;display CRLF
add esp,4                   ;clean up the stack

;-----
;  Display and get info
;    for 20 characters
;-----

push offset strTypeStrPrompt20 ;allow up to 20 characters and
call putstring              ; display the max 20 chars message
                             ;display string input code
```



```

add esp,6                ;clean up the stack

push word ptr MAXCHAR20  ;only allow 20 characters max
push offset strInput     ;string's address to store in
call getstring           ;display a string
add esp,6                ;clean up the stack

push offset CRLF         ;CRLF's address
call putstring           ;display CRLF
add esp,4                ;clean up the stack

push offset strEnteredPrompt ;pass string's address to display
call putstring           ;display entered string prompt
add esp,4                ;clean up the stack

push offset strInput     ;pass string's address to display
call putstring           ;display entered string
add esp,4                ;clean up the stack

push offset CRLF         ;CRLF's address
call putstring           ;display CRLF
add esp,4                ;clean up the stack

push offset CRLF         ;CRLF's address
call putstring           ;display CRLF
add esp,4                ;clean up the stack

;-----
;  Display and get info
;    for 10 numbers
;-----

push offset strTypeNumPrompt10 ;allow up to 10 characters and
call putstring                 ; display the max 10 chars message
add esp,6                     ;display string input code
                               ;clean up the stack

push word ptr MAXCHAR10      ;only allow 10 characters max
push offset strInput         ;string's address to store in
call getnum                  ;display the input string
add esp,6                    ;clean up the stack

push offset CRLF             ;CRLF's address
call putstring               ;display CRLF
add esp,4                    ;clean up the stack

push offset strEnteredPrompt ;pass string's address to display
call putstring               ;display entered string prompt
add esp,4                    ;clean up the stack

push offset strInput         ;pass string's address to display
call putstring               ;display entered string
add esp,4                    ;clean up the stack

```


Command Prompt

C:\Users\willjasen>cd Desktop

C:\Users\willjasen\Desktop>cd Proj2BWB

C:\Users\willjasen\Desktop\Proj2BWB>proj2bwb.exe

My name is Brandon Buchanan.

What is yours (less than 20 characters)? John Doe

Hello and good day, John Doe.

Type a maximum of 10 characters and press ENTER: I went to

You entered the string: I went to

Type a maximum of 15 characters and press ENTER: I went to the s

You entered the string: I went to the s

Type a maximum of 20 characters and press ENTER: I went to the store

You entered the string: I went to the store

Enter a max of 10 numeric characters and press ENTER: +134

You entered the string: +134

Enter a max of 5 numeric characters and press ENTER: +2134

You entered the string: +2134

C:\Users\willjasen\Desktop\Proj2BWB>

