

; Listing generated by Microsoft (R) Optimizing Compiler Version 16.00.40219.01

```
TITLE    C:\Users\Michael_Geiger\Documents\courses\16.317_micros_I\12\misc\hll_assembly_test\
hll_assembly_test\testfile2.c
.686P
.XMM
include listing.inc
.model flat
```

```
INCLUDELIB MSVCRTD
INCLUDELIB OLDNAMES
```

```
_DATA    SEGMENT
COMM     _a:DWORD
COMM     _c:DWORD
COMM     _b:DWORD
_DATA    ENDS
PUBLIC   ??_C@_0BI@HLEICADJ@a?5?$DN?5?$CFd?0?5b?5?$DN?5?$CFd?0?5c?5?$DN?5?$CFd?6?$AA@ ; `string'
PUBLIC   ??_C@_0800HKHLP0@?$CFd?5?$CFd?5?$CFd?$AA@ ; `string'
PUBLIC   _main
EXTRN    __imp__printf:PROC
EXTRN    __imp__scanf:PROC
EXTRN    __RTC_CheckEsp:PROC
EXTRN    __RTC_Shutdown:PROC
EXTRN    __RTC_InitBase:PROC
; COMDAT ??_C@_0BI@HLEICADJ@a?5?$DN?5?$CFd?0?5b?5?$DN?5?$CFd?0?5c?5?$DN?5?$CFd?6?$AA@
; File c:\users\michael_geiger\documents\courses\16.317_micros_i\12\misc\hll_assembly_test\
hll_assembly_test\testfile2.c
CONST    SEGMENT
??_C@_0BI@HLEICADJ@a?5?$DN?5?$CFd?0?5b?5?$DN?5?$CFd?0?5c?5?$DN?5?$CFd?6?$AA@ DB 'a'
DB ' = %d, b = %d, c = %d', 0aH, 00H ; `string'
CONST    ENDS
; COMDAT ??_C@_0800HKHLP0@?$CFd?5?$CFd?5?$CFd?$AA@
CONST    SEGMENT
??_C@_0800HKHLP0@?$CFd?5?$CFd?5?$CFd?$AA@ DB '%d %d %d', 00H ; `string'
CONST    ENDS
; COMDAT rtc$TMZ
rtc$TMZ  SEGMENT
__RTC_Shutdown.rtc$TMZ DD FLAT:__RTC_Shutdown
rtc$TMZ  ENDS
; COMDAT rtc$IMZ
rtc$IMZ  SEGMENT
__RTC_InitBase.rtc$IMZ DD FLAT:__RTC_InitBase
; Function compile flags: /Odtp /RTCsu /ZI
rtc$IMZ  ENDS
; COMDAT _main
_TEXT    SEGMENT
_main    PROC ; COMDAT

; 5      : void main() {

    push    ebp
    mov ebp, esp
    sub esp, 192 ; 000000c0H
    push    ebx
    push    esi
    push    edi
    lea edi, DWORD PTR [ebp-192]
    mov ecx, 48 ; 00000030H
    mov eax, -858993460 ; ccccccccH
    rep stosd

; 6      :    scanf("%d %d %d", &a, &b, &c);

    mov esi, esp
    push    OFFSET _c
```

```
    push    OFFSET _b
    push    OFFSET _a
    push    OFFSET ??_C@_0800HKHLP0@?$CFd?5?$CFd?5?$CFd?$AA@
    call     DWORD PTR __imp__scanf
    add esp, 16                ; 00000010H
    cmp esi, esp
    call     __RTC_CheckEsp

; 7      :    printf("a = %d, b = %d, c = %d\n", a, b, c);

    mov esi, esp
    mov eax, DWORD PTR _c
    push    eax
    mov ecx, DWORD PTR _b
    push    ecx
    mov edx, DWORD PTR _a
    push    edx
    push    OFFSET ??_C@_0BI@HLEICADJ@a?5?$DN?5?$CFd?0?5b?5?$DN?5?$CFd?0?5c?5?$DN?5?$CFd?6?$AA@
    call     DWORD PTR __imp__printf
    add esp, 16                ; 00000010H
    cmp esi, esp
    call     __RTC_CheckEsp

; 8      :    }

    xor eax, eax
    pop edi
    pop esi
    pop ebx
    add esp, 192                ; 000000c0H
    cmp ebp, esp
    call     __RTC_CheckEsp
    mov esp, ebp
    pop ebp
    ret 0
_main     ENDP
_TEXT     ENDS
END
```