Chap 8 (Week 10)

組別

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1. Passing Arguments by Value

.data

val1 DWORD 5

val2 DWORD 6

.code

push val2

push val1

Call AddTwo

Equivalent function call in C++ would be:

\_\_\_\_\_AddTwo(val1, val2);\_\_\_\_\_\_\_\_\_\_\_\_

1. Passing Arguments by Reference

.data

val1 DWORD 5

val2 DWORD 6

.code

push OFFSET val2

push OFFSET val1

Call Swap

Equivalent function call in C++ would be:

\_\_\_\_\_Swap(&val1, &val2)\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Create a procedure named Difference that subtracts the second argument(Val2) from the first one(Val1). (Val1 – Val2)

Following is a sample call:

push 14 ; Val2

push 30 ; Val1

call Difference ; EAX = 16

Difference PROC

|  |
| --- |
| push ebp  mov ebp, esp  mov eax, [ebp+8]  sub eax, [ebp+12]  pop ebp  ret 8 |

Difference ENDP

1.

CopyString PROC, count: DWORD

LOCAL temp[20]: BYTE

mov edi, OFFSET count ; invalid operand

mov esi, OFFSET temp ; invalid operand

|  |
| --- |
| lea edi, count  lea esi, temp |

2.

Difference PROC

push ebp

mov ebp, esp

mov eax, [ebp + 8] ; first argument

sub eax, [ebp + 12] ; second argument

pop ebp

ret 8

Difference ENDP

Difference PROC

|  |
| --- |
| enter 0, 0 |

mov eax, [ebp + 8] ; first argument

sub eax, [ebp + 12] ; second argument

pop ebp

ret 8

Difference ENDP

3.

Example1 PROC

LOCAL tempArray[4]:DWORD

…

ret

Example1 ENDP

Example1 PROC

|  |
| --- |
| push ebp  mov ebp, esp  sub esp, 16 |

…

|  |
| --- |
| mov esp, ebp  pop ebp |

ret

Example1 ENDP