

## Chap 8 (Week 10)

組別 45

組員

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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);

### 2. 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);

### 3. 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

mov eax,val1

sub eax,val2

ret

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

add esp, 0FFFFFFCh

...

mov esp, ebp

pop ebp

ret

Example1 ENDP