

Assembly

12.1.11

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- `func proc uses ebx ecx`
- `func proc [language type] uses register list [parameters]`
- `func proc Near32`
 - `push ebp`
 - `mov ebp, esp`
- `func proc stdcall uses ebx ecx esi,`
 - `lpArray: dword, ; comment`
 - `numValues: dword, ; comment`
- `func (tarray, Num)`
- `stdcall` means that the function itself cleans up the stack, not the calling program
- `f proc stdcall uses ...`
 - `iVal1: dword,`
 - `iVal2: dword`
 - `local x: dword,`
 - `y: dword,`
 - `t: dword`
- `int f(sVal, dVal, bVal) →`
 - `f proc stdcall uses ...`
 - `sVal: word,`
 - `dVal: dword,`
 - `bVal: byte`
- `INVOKE` works only if you specify a language type
- `INVOKE f, sx, dx, bVal1`
- `INVOKE f, 0, 4, 3`
- `g(tarray, dVal)`
 - `g PROC stdcall uses , offset array, 27, dNum: dword`
- `INVOKE g, offset array, 27`
- every parameter comes in as a 4 byte value
- `INVOKE g, addr array, 27`

- g PROTO stdcall, lpArray: ptr word, dValid: dword
- for a prototype, use everything but the uses directive
- list prototype under .stack
- ExitProcess PROTO stdcall, dExitValue: dword

INVOKE ExitProcess, 0

- f(a,b)
- {

int i; ix = new int[5] sub esp, 20

- lea esi, [ebp-4] ; get address from EBP, subtract 4, then load into esi