

```

Calc1  PROC STDCALL    USES eax ebx,
        lpBuf:PTR BYTE
        LOCAL dVal:DWORD

        mov esi, lpBuf
        mov dVal, eax
        ;.
        ;|.
        ret
Calc1  ENDP

```

```

Calc2  PROC
        push ebp
        mov ebp,esp
        add esp,0FFFFFFCh; sub esp,4
        push    eax
        push    ebx
        mov esi, [ebp+8]
        mov [ebp-4],eax
        pop     ebx
        pop     eax
        leave
        ret 4
Calc2  ENDP

```

With stdcall (Windows API) the called program cleans up the stack for the passed parameters, by modifying the RET statement =  $n*4$  where  $n$  = # of parameters

```

0x00401105 55 8b ec 83 c4 fc 50 53 8b 75 08 89 45 fc 5b 58 U.....PS.u..E.[X
0x00401115 c9 c2 04 00 55 8b ec 83 c4 fc 50 53 8b 75 08 89 ....U.....PS.u..
0x00401119 55 8b ec 83 c4 fc 50 53 8b 75 08 89 45 fc 5b 58 U.....PS.u..E.[X
0x00401129 c9 c2 04 00 55 8b ec 53 56 8b 45 08 03 45 0c 5e ....U..SV.E..E.^

```

```

31 ArraySum    PROC uses esi ecx
32     mov eax,0
33 l1A:
34     add eax,[esi]
35     add esi, type dword
36     loop    l1a
37     ret
38 arraySum ENDP
39
40 ArraySum2    Proc
41     push esi
42     push ecx
43     mov eax,0
44 l1B: add eax,[esi]
45     add esi,type dword
46     loop l1B
47     pop ecx
48     pop esi
49     ret
50 ArraySum2 endp

```

Memory(0x4010cf)

```

0x004010CF 56 51 b8 00 00 00 00 03 06 83 c6 04 e2 f9 59 5e VQ.....Y^
0x004010DF c3 56 51 b8 00 00 00 00 03 06 83 c6 04 e2 f9 59 .VQ.....Y

```

Memory(0x4010e0)

```

0x004010E0 56 51 b8 00 00 00 00 03 06 83 c6 04 e2 f9 59 5e VQ.....Y^
0x004010F0 c3 55 8b ec 53 56 8b 45 08 03 45 0c 5e 5b 5d c2 .U..SV.E..E.^[].

```