

C++ Tricks 2.3 I386

C



farseerfc.wordpress.com

2.3 I386 C

esp
esp
esp

esp
esp
ebp
ebp
ebp

void f()

```

{
int a=0; //a[ebp-4]
char c=1; //c[ebp-8]
}

[ebp]

push ebp ;[ebp]
mov ebp,esp ;ebp=esp [ebp]
sub esp,8 ;esp-=8[a][c]
mov dword ptr[ebp-4],0 ;a=0
mov byte ptr[ebp-8],1 ;c=1
add esp,8 ;esp+=8[a][c]
mov esp,ebp ;esp=ebp [ebp]
pop ebp ;[ebp]
ret ;[]

```

```

[ebp]

09992:c=1 <-esp
09996:a=0
10000:[ebp] <-ebp
10004:.....

[]:[]pop[]push[]call[]ret[]
push ebp[]:
add esp,4
mov dword ptr[esp],ebp
pop ebp[]

```

mov ebp,dword ptr[esp]

sub esp,4

call fun_address

push eip

jmp fun_address

ret

add esp,4

jmp dword ptr[esp-4]

ret

ret 8

add esp,12

jmp dword ptr[esp-4]

void f()

{

int i,a[10];

for(i=0;i<=10;++i)a[i]=0;/An error occurs here!

}

C++
“”

a[10]a[10]C++“”
a[10]a
i!

i386a
a[i]i0

[illegible]