

## The Evolution of a Programmer

Vložil/a [cm3l1k1](#) [1], 13 Květen, 2006 - 00:20

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Velice povedený text znázorňující postup různých typů programátorů k vypsání známé hlášky Hello World. Určitě stojí za přečtení ;o)

### High School/Jr.High

```
10 PRINT "HELLO WORLD"  
20 END
```

### First year in College

```
program Hello(input, output)  
begin  
    writeln('Hello World')  
end.
```

### Senior year in College

```
(defun hello  
  (print  
    (cons 'Hello (list 'World))))
```

### New professional

```
#include <stdio.h>  
void main(void)  
{  
    char *message[] = {"Hello ", "World"};  
    int i;  
  
    for(i = 0; i < 2; ++i)  
        printf("%s", message[i]);  
    printf("\n");  
}
```

### Seasoned professional

```
#include <iostream.h>  
#include <string.h>  
  
class string  
{  
private:  
    int size;  
    char *ptr;  
  
public:  
    string() : size(0), ptr(new char('\0')) {}
```

```
string(const string &s) : size(s.size)
{
    ptr = new char[size + 1];
    strcpy(ptr, s.ptr);
}

~string()
{
    delete [] ptr;
}

friend ostream &operator <<(ostream &os, const string &s);
string &operator=(const char *);
};

ostream &operator<<(ostream &stream, const string &s)
{
    return(stream << s.ptr);
}

string &string::operator=(const char *chrs)
{
    if (this != &chrs)
    {
        delete [] ptr;
        size = strlen(chrs);
        ptr = new char[size + 1];
        strcpy(ptr, chrs);
    }
    return(*this);
}

int main()
{
    string str;

    str = "Hello World";
    cout << str << endl;

    return(0);
}
```

## Master Programmer

```
[
    uuid(2573F8F4-CFEE-101A-9A9F-00AA00342820)
]
library LHello
{
    // bring in the master library
    importlib("actimp.tlb");
    importlib("actexp.tlb");

    // bring in my interfaces
    #include "pshlo.idl"

    [
        uuid(2573F8F5-CFEE-101A-9A9F-00AA00342820)
```

```
    ]
    cotype THello
{
interface IHello;
interface IPersistFile;
};
};

[
exe,
uuid(2573F890-CFEE-101A-9A9F-00AA00342820)
]
module CHelloLib
{

    // some code related header files
    importheader(<windows.h>);
    importheader(<ole2.h>);
    importheader(<except.hxx>);
    importheader("pshlo.h");
    importheader("shlo.hxx");
    importheader("mycls.hxx");

    // needed typelibs
    importlib("actimp.tlb");
    importlib("actexp.tlb");
    importlib("thlo.tlb");

    [
    uuid(2573F891-CFEE-101A-9A9F-00AA00342820),
    aggregatable
    ]
    coclass CHello
    {
    cotype THello;
    };
};

#include "ipfix.hxx"

extern HANDLE hEvent;

class CHello : public CHelloBase
{
public:
    IPFIX(CLSID_CHello);

    CHello(IUnknown *pUnk);
    ~CHello();

    HRESULT __stdcall PrintSz(LPWSTR pwszString);

private:
    static int cObjRef;
};

#include <windows.h>
#include <ole2.h>
#include <stdio.h>
```

```
#include <stdlib.h>
#include "thlo.h"
#include "pshlo.h"
#include "shlo.hxx"
#include "mycls.hxx"

int CHello::cObjRef = 0;

CHello::CHello(IUnknown *pUnk) : CHelloBase(pUnk)
{
    cObjRef++;
    return;
}

HRESULT __stdcall CHello::PrintSz(LPWSTR pwszString)
{
    printf("%ws\n", pwszString);
    return(ResultFromCode(S_OK));
}

CHello::~CHello(void)
{
    // when the object count goes to zero, stop the server
    cObjRef--;
    if( cObjRef == 0 )
        PulseEvent(hEvent);

    return;
}

#include <windows.h>
#include <ole2.h>
#include "pshlo.h"
#include "shlo.hxx"
#include "mycls.hxx"

HANDLE hEvent;

int _cdecl main(
int argc,
char * argv[]
) {
    ULONG ulRef;
    DWORD dwRegistration;
    CHelloCF *pCF = new CHelloCF();

    hEvent = CreateEvent(NULL, FALSE, FALSE, NULL);

    // Initialize the OLE libraries
    CoInitializeEx(NULL, COINIT_MULTITHREADED);

    CoRegisterClassObject(CLSID_CHello, pCF, CLSCTX_LOCAL_SERVER,
        REGCLS_MULTIPLEUSE, &dwRegistration);

    // wait on an event to stop
    WaitForSingleObject(hEvent, INFINITE);

    // revoke and release the class object
```

```
CoRevokeClassObject(dwRegistration);
ulRef = pCF->Release();

// Tell OLE we are going away.
CoUninitialize();

return(0); }

extern CLSID CLSID_CHello;
extern UUID LIBID_CHelloLib;

CLSID CLSID_CHello = { /* 2573F891-CFEE-101A-9A9F-00AA00342820 */
    0x2573F891,
    0xCFEE,
    0x101A,
    { 0x9A, 0x9F, 0x00, 0xAA, 0x00, 0x34, 0x28, 0x20 }
};

UUID LIBID_CHelloLib = { /* 2573F890-CFEE-101A-9A9F-00AA00342820 */
    0x2573F890,
    0xCFEE,
    0x101A,
    { 0x9A, 0x9F, 0x00, 0xAA, 0x00, 0x34, 0x28, 0x20 }
};

#include <windows.h>
#include <ole2.h>
#include <stdlib.h>
#include <string.h>
#include <stdio.h>
#include "pshlo.h"
#include "shlo.hxx"
#include "clsid.h"

int _cdecl main(
int argc,
char * argv[]
) {
HRESULT hrslt;
IHello *pHello;
ULONG ulCnt;
IMoniker * pmk;
WCHAR wcsT[_MAX_PATH];
WCHAR wcsPath[2 * _MAX_PATH];

// get object path
wcsPath[0] = '\\0';
wcsT[0] = '\\0';
if( argc > 1) {
    mbstowcs(wcsPath, argv[1], strlen(argv[1]) + 1);
    wcsupr(wcsPath);
}
else {
    fprintf(stderr, "Object path must be specified\n");
    return(1);
}

// get print string
if(argc > 2)
```

```
    mbstowcs(wcsT, argv[2], strlen(argv[2]) + 1);
else
    wcsncpy(wcsT, L"Hello World");

printf("Linking to object %ws\n", wcsPath);
printf("Text String %ws\n", wcsT);

// Initialize the OLE libraries
hRslt = CoInitializeEx(NULL, COINIT_MULTITHREADED);

if(SUCCEEDED(hRslt)) {

    hRslt = CreateFileMoniker(wcsPath, &pmk);
    if(SUCCEEDED(hRslt))
    hRslt = BindMoniker(pmk, 0, IID_IHello, (void **)&pHello);

    if(SUCCEEDED(hRslt)) {

        // print a string out
        pHello->PrintSz(wcsT);

        Sleep(2000);
        ulCnt = pHello->Release();
    }
    else
    printf("Failure to connect, status: %lx", hRslt);

    // Tell OLE we are going away.
    CoUninitialize();
}

return(0);
}
```

## Apprentice Hacker

```
#!/usr/local/bin/perl
$msg="Hello, world.\n";
if ($#ARGV >= 0) {
    while(defined($arg=shift(@ARGV))) {
        $outfilename = $arg;
        open(FILE, ">" . $outfilename) || die "Can't write $arg: $!\n";
        print (FILE $msg);
        close(FILE) || die "Can't close $arg: $!\n";
    }
} else {
    print ($msg);
}
1;
```

## Experienced Hacker

```
#include <stdio.h>
#define S "Hello, World\n"
main(){exit(printf(S) == strlen(S) ? 0 : 1);}
```

# The Evolution of a Programmer

Publikováno na serveru Security-Portal.cz (<https://www.security-portal.cz>)

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## Seasoned Hacker

```
% cc -o a.out ~/src/misc/hw/hw.c
% a.out
```

## Guru Hacker

```
% cat
Hello, world.
^D
```

## New Manager

```
10 PRINT "HELLO WORLD"
20 END
```

## Middle Manager

```
mail -s "Hello, world." bob@b12
Bob, could you please write me a program that prints "Hello, world."?
I need it by tomorrow.
^D
```

## Senior Manager

```
% zmail jim
I need a "Hello, world." program by this afternoon.
```

## Chief Executive

```
% letter
letter: Command not found.
% mail
To: ^X ^F ^C
% help mail
help: Command not found.

% damn!
!: Event unrecognized
% logout
```

## Research Scientist

```
PROGRAM HELLO
PRINT *, 'Hello World'
END
```

## Older research Scientist

```
WRITE (6, 100)
100 FORMAT (1H ,11HELLO WORLD)
CALL EXIT
END
```

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Zdroj: <http://www.gnu.org/fun/jokes/helloworld.html> [4]

**URL článku:** <https://www.security-portal.cz/clanky/evolution-programmer>

### Odkazy:

[1] <https://www.security-portal.cz/users/cm3l1k1>

[2] <https://www.security-portal.cz/category/tagy/fun>

[3] <https://www.security-portal.cz/category/tagy/programming>

[4] <http://www.gnu.org/fun/jokes/helloworld.html>