**C++：**

**“变量”的极小作用域：作用域只为“一行”**

**类的另类用法：类名做函数名使用**

请略看下面的类：

class \_cast

{

#define RETURN\_CAST(type) \

int len = strData.GetLength(); \

puchar = new unsigned char[(len+1)\*sizeof(type)];\

type \*p = (type \*)puchar; \

for(int i=0; i<len; i++) \

p[i] = (char)strData[i]; \

p[len] = 0; \

return p;

public:

~\_cast(){if(puchar) delete [] puchar;}

\_cast(const char \*pchar) {puchar = NULL; strData = pchar;}

\_cast(const wchar\_t \*pwchar){puchar = NULL; strData = pwchar;}

\_cast(const BYTE \*pbyte) {puchar = NULL; strData = (const char \*)pbyte;}

\_cast(const CString pstr ) {puchar = NULL; strData = pstr;}

\_cast(short idata) {puchar = NULL; strData.Format(\_T("%d"), idata);}

\_cast(int idata) {puchar = NULL; strData.Format(\_T("%d"), idata);}

\_cast(long idata) {puchar = NULL; strData.Format(\_T("%d"), idata);}

\_cast(unsigned short idata) {puchar = NULL; strData.Format(\_T("0x%X"), idata);}

\_cast(unsigned int idata) {puchar = NULL; strData.Format(\_T("0x%X"), idata);}

\_cast(unsigned long idata) {puchar = NULL; strData.Format(\_T("0x%X"), idata);}

operator char \*() {RETURN\_CAST(char);}

operator wchar\_t \*() {RETURN\_CAST(wchar\_t)}

operator BYTE \*() {RETURN\_CAST(BYTE)}

operator CString () {return strData;}

operator short () {return (short) \_tcstol(strData, NULL, 0);}

operator int () {return (int) \_tcstol(strData, NULL, 0);}

operator long () {return (long) \_tcstol(strData, NULL, 0);}

operator unsigned short () {return (unsigned short) \_tcstoul(strData, NULL, 0);}

operator unsigned int () {return (unsigned int) \_tcstoul(strData, NULL, 0);}

operator unsigned long () {return (unsigned long) \_tcstoul(strData, NULL, 0);}

protected:

CString strData;

unsigned char \*puchar;

};

void SaveFile(const char \*path);

mian()

{

wchar\_t \*path = L”liqiang nihao”;

SaveFile(\_cast(path)); //\_cast取代的类型转换函数，而却是可重入的

return 0;

}

解读SaveFile(\_cast(path))：

* **类的另类用法->类名做函数名使用:**

该\_cast优雅实现了char \*trans(wchar\_t \*)函数（wchar\_t \*到char \*的转换）和更多数据转换。因为普通的单一该trans函数无法实现内存申请并且在使用完成之后释放该内存(可重入)，但\_cast类通过构造，类型转换，析构实现了内存申请、数据转换、内存释放。

* **“变量”的极小作用域->作用域只为“一行”**

通过该\_cast构造的数据在SaveFile()函数结束之后，就被析构了----不存在了.