例：程序C++11\_test3

void Func(int(& arr)[5])

{

// 必须是数组的引用才能使用begin和end

for (auto p = *begin*(arr); p != *end*(arr); ++p)

{

*cout* << \*p << " ";

}

}

int main(int argc, char\* argv[])

{

*string* str{"some string!!!"};

decltype(str.*size*()) punct\_count = 0;

// 范围for语句

// 统计标点符号

for (auto c : str)

{

if (*ispunct*(c))

{

++punct\_count;

}

}

*cout* << punct\_count

<< " punctuation characters in " << str << *endl*;

// 范围for语句中修改字符

// 采用引用

for (auto& c : str)

{

c = *toupper*(c);

}

*cout* << "Upper characters " << str << *endl*;

// for语句使用下标修改字符

for (decltype(str.*size*()) index = 0; index != str.*size*(); ++index)

{

str[index] = *tolower*(str[index]);

}

for (decltype(str.*size*()) index = str.*size*() - 1; index >= 0 && index < str.*size*(); --index)

{

str[index] = *tolower*(str[index]);

}

*cout* << "Lower characters " << str << *endl*;

// 访问普通的数组

int arr[5] = {1, 2, 3, 4, 5};

// begin和end无法判断通过new创建的数组

for (auto p = *begin*(arr); p != *end*(arr); ++p)

{

*cout* << \*p << " ";

}

*cout* << *endl*;

return 0;

}

输出为：

3 punctuation characters in some string!!!

Upper characters SOME STRING!!!

Lower characters some string!!!

1 2 3 4 5