

挿入ソート

[VC++.NET]

VC++.NET 2005

```
using namespace System;
using namespace System::Collections;

static void insertionSort( array<String^>^ ary ) {
    String^ key;
    for (long i=1; i < ary->Length; i++) {
        for (long j=0; j<i; j++) {
            if ( ary[i]->CompareTo(ary[j]) < 0 ) {
                key = ary[i];
                for (long k=i; k>j; k--) {
                    ary[k] = ary[k-1];
                }
                ary[j] = key;
                break;
            }
        }
    }
}

static void sort( array<String^>^ ary ) {
    insertionSort(ary);
}

static void print( array<String^>^ ary ) {
    for (int i=0; i<ary->Length; i++) {
        Console::WriteLine(ary[i]);
    }
}

int main(array<System::String ^> ^args)
{
    String^ line;
    IList^ list = gcnew ArrayList();

    while ( (line = Console::ReadLine()) != nullptr ) {
        list->Add(line);
    }

    array<String^>^ ary = gcnew array<String^>(list->Count);
    list->CopyTo(ary, 0);

    sort(ary);
    print(ary);
    return 0;
}
```