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// Coda-C example #1:  Array and Void objects.

// Task:  Print lines from <stdin> in sorted order.

static int compare(char**aa,char**bb) { return strcmp(*aa,*bb); }

static void sortList(Arraylist) {
    qsort(Array_rawAddress(list), Array_count(list), sizeof(pointer), (pointer)compare);
}

static void codax01() {
    Arraylist=new0(Array);
    while(1) {
        charaa[1024], *bb=fgets(aa,1000,stdin);if(!bb)break;
        char*str=alloc0(strlen(bb)+1); strcpy(str,bb);
        Array_addObject(list,str);free0(str);
    }
    sortList(list);
    for(intj=0;j<Array_count(list);++j) {
        printf("%s", (char*)Array_subInt(list,j));
    }
    free0(list);
}

codax_register(codax01)// test harness setup

// Purpose:  To demonstrate how a dynamic Array can simplify C programming.
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// Coda-C adds the following:

// new0()      - create a new object
// alloc0()    - create a classless object
// free0()     - reduce the retain count for an object and release if zero


// pointer      - C data type aka (void *)
// Array        - C data type
// Array_addObject() - add an object to an Array
// Array_count() - number of elements in a Array
// Array_subInt() - return object in an Array by subscript
// Array_rawAddress() - get base address of array


/*<stdin> test input
a
eeeeee
ccc
bb
dddd
*****/

/*<stdout> example's output
a
bb
ccc
dddd
eeeeee
*****/
```