**排序查找实验报告**

Class: 计科201

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**One. Experimental purpose**

1) Familiar with the basic operations of the sort.

2) Master the operation of various internal sorting.

3) Deepen the understanding of the sort, and to develop the programming ability of solving practical problems gradually.

**Two. Experimental environment**

Computers equipped with Visual C6.0/CFree.

The experiment lasted for 4 hours.

**Three. Experimental content**

A series of strings are stored in a two-dimensional array. Try to sort them with some sorting algorithms (at least two algorithms, such as insert sorting, bubble sorting, quick sorting, and heap sorting). You should sort them to dictionary order finally.

For example: two-dimensional array is :

char s[][20]={“while”，”if”，“else”，”do”，“for”，”switch”，“case”};

## Four. Requirement

**Four. Important data structures**

void sortMaoPao(string list[],int len) {//冒泡

for(int i=0;i<len-1;i++){

for(int j=0;j<len-1-i;j++){

if(list[j+1]<list[j]){

string tem=list[j+1];

list[j+1]=list[j];

list[j]=tem;

}

}

}

}

void sortedSort(string list[],int len){//选择

for(int i=0;i<len-1;i++){

string temp=list[i];

int index=i;

for (int j=i;j<len;j++){

if(temp>list[j]){

temp=list[j];

index=j;

}

}

if(index!=i){

list[index]=list[i];

list[i]=temp;

}

}

}

void insertSort(string list[],int len){//插入排序

for(int i=1;i<len;i++){

int index=i-1;

string val=list[i];

while (index>=0 && val<list[index]){

list[index+1]=list[index];

index--;

}

list[index+1]=val;

}

}

void print(string list[],int len){

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

cout<<list[i]<<" ";

}

**Five. Realization idea analysis**

**按照数学逻辑进行代码for循环**

**Six. Program debugging problem analysis**

For循环的结构需要理解清楚，容易造成死循环

**Seven. Experimental summary**

排序算法需要熟练掌握，项目设计排序必不可少

**Eight. Crew Division**

|  |  |  |
| --- | --- | --- |
| **Group division** | | |
| **Member name** | **Work done** | **Completion situation** |
| **黄柏宁** | **资料查询及代码设计** | **完成** |
| **郭旭** | **代码书写及代码测试** | **完成** |
| **俞幸宏** | **报告书写及代码测试** | **完成** |