

Answer on Question #44587, Programming, C++

Problem.

write a function sort() to perform the sorting algorithm. But i don't know how to sort the names by alphabetical order. Thanks.

```
#include<iostream>
#include<iomanip>
#include<string>
using namespace std;
int main()
{
const int arraySize=20;
string
name[arraySize]={"John","Catherine","Shelly","Zane","Ben","Tom","Albert","Melly","Danny","Jane","Elsa","
Fiona","George"
<<"Harry","Idina","Kelly","Lance","Nandos","Patrick","Rose"};
int i,hold;

for(i=0;i<arraySize;i++)
{
cout<<" "<<a[i];
}

for(int pass=0;pass<arraySize-1;pass++)
{
for(i=0;i<arraySize-1;i++)
{
if(a[i]>a[i+1])
{
hold=a[i];
a[i]=a[i+1];
a[i+1]=hold;
}
}
}

for(i=0;i<arraySize;i++)
{
cout<<" "<<a[i];
}

return 0;
}
```

Solution.

The operators > and < are reloaded for string (see [lexicographical compare](#))

Code

```
#include<iostream>
#include<string>

using namespace std;

// sort() function
void sort(string name[], int arraySize) {
    string hold;
```

```

// Print out values of array before sorting
cout << "Before sorting: " << endl;
for (int i = 0; i < arraySize; i++) {
    cout << name[i] << " ";
    if ((i + 1) % 10 == 0) {
        cout << endl;
    }
}

// Bubble sort
for (int i = 0; i < arraySize - 1; i++) {
    for(int j = 0; j < arraySize - 1; j++) {
        if(name[j] > name[j + 1]) { // the operators > and < are reloaded
for strings
            // Swap two values
            hold = name[j];
            name[j] = name[j + 1];
            name[j + 1] = hold;
        }
    }
}

// Print out values of array after sorting
cout << "After sorting: " << endl;
for (int i = 0; i < arraySize; i++) {
    cout << name[i] << " ";
    if ((i + 1) % 10 == 0) {
        cout << endl;
    }
}

return;
}

int main() {
    const int arraySize = 20;
    string name[arraySize] = {"John", "Catherine", "Shelly", "Zane", "Ben",
"Tom", "Albert", "Melly",
    "Danny", "Jane", "Elsa", "Fiona", "George", "Harry", "Idina", "Kelly",
"Lance", "Nandos",
    "Patrick", "Rose"};

    sort(name, arraySize);
    return 0;
}

```

Result

```
Before sorting:
John Catherine Shelly Zane Ben Tom Albert Melly Danny Jane
Elsa Fiona George Harry Idina Kelly Lance Nandos Patrick Rose
After sorting:
Albert Ben Catherine Danny Elsa Fiona George Harry Idina Jane
John Kelly Lance Melly Nandos Patrick Rose Shelly Tom Zane

Process returned 0 (0x0)   execution time : 0.102 s
Press any key to continue.
```