

```
Script started on 2021-10-02 20:14:08-05:00 [TERM="xterm" TTY="/dev/pts/6" COLUMNS:
k_gandhi6@ares:~$ cat RainingStrings.info
Name: Kush Gandhi

Course: CSC122-001

Levels: 2

Title: It's Raining Strings! (Lab)

Description: Takes input of Busines names and outputs
them as the prgram continous.

k_gandhi6@ares:~$ cat RainingStrings.h
#ifndef RAINING_STRINGS_H_INC
#define RAINING_STRINGS_H_INC

#include <iostream>

#include <vector>

#include <string>

using namespace std;

void sortBusiness(vector<string>& bizz) {
    string n;
    for (unsigned int i = 1; i < bizz.size(); i++) {
        for (unsigned int j = 0; j < bizz.size() - 1; j++) {
            if (bizz[j] > bizz[i]) {
                n = bizz[j];
                bizz[j] = bizz[i];
                bizz[i] = n;
            }
        }
    }
}
```

```
void displayList(vector<string>& bizz) {
    for (unsigned int i = 0; i != bizz.size(); i++) {
        cout << bizz[i] << "\n";
    }
}

void names(vector<string>& names) {
    if (names.size() == 1) {
        cout << "\nYour business is: \n\n";
    }
    else {
        cout << "\nYour businesses are: \n\n";
    }
}

#endif

k_gandhi6@ares:~$ cat RainingStrings.cpp
#include <iostream>

#include <string>

#include <vector>

#include <cctype>

#include "RainingStrings.h"

using namespace std;

vector<string>::size_type bizz;

vector<string> businessName;
```

```
int main() {

    string bizzName;

    char ans = 'y';

    cout << "\t\tWelcome to the Business sorting program\n\n";

    do {

        cout << "\nPlease enter the name of a business: ";
        getline(cin, bizzName);
        businessName.push_back(bizzName);
        sortBusiness(businessName);
        names(businessName);
        displayList(businessName);
        cout << "\nWould you like to enter another one? (y/n) ";
        cin >> ans;
        while (ans == 'N' || ans == 'n') {
            cout << "\nThanks for using my sorting program!!\n";
            return 0;
        }
        cin.ignore();

    } while (ans == 'y' || ans == 'Y');

}

k_gandhi6@ares:~$ CPP RainingStrings
RainingStrings.cpp***

k_gandhi6@ares:~$ ./RainingStrings.out
Welcome to the Business sorting program
```

Please enter the name of a business: Walmart

Your business is:

Walmart

Would you like to enter another one? (y/n) Y

Please enter the name of a business: Best Buy

Your businesses are:

Best Buy
Walmart

Would you like to enter another one? (y/n) y

Please enter the name of a business: Apple

Your businesses are:

Apple
Best Buy
Walmart

Would you like to enter another one? (y/n) n

Thanks for using my sorting program!!

k_gandhi6@ares:~\$ cat RainingStrings.tpq

1. How do you read names that might or might not contain spaces?

I basically used a simple function called the getline(). This helps read the user input to count as a place holder in the string.

2. How do you store multiple (C)strings together in a single variable?

By simply using a vector to store all of the information.

3. How do you sort (C)strings? (Hint: Most books/sites discuss sorting with respect to numbers. What might you need to modify for sorting (C)strings?)

I used a Bubble sort to sort the vectors.

4. How can you access a single row of a 2D array?

To access a single row, you would use the first bracket.

for example, array[row][column] the first one is for row and the second is for column.

5. Can you pass a single (C)string from an array to, say, strcmp?

No, you can't compare a single Cstring because the function needs to read 2 strings to compare.

6. How can your 'again' question accept either characters or words?

How can it be case insensitive?

I used a do while loop to validate the user response. For example, the user is able to enter Y or y to continue the program.

```
k_gandhi6@ares:~$ exit
exit
```

```
Script done on 2021-10-02 20:22:34-05:00 [COMMAND_EXIT_CODE="0"]
```