Lessons Learned – TH 9

```
//*************************************************************
//CHANGE EVERY FIRST LETTER INTO A CAPITAL
//*************************************************************
void upperCaseIt(string& User_input) {
    User_input[0] = toupper(User_input[0]);

    for (int i = 1; i < User_input.length(); i++)
    {
        if (User_input[i - 1] == ' ')
            User_input[i] = toupper(User_input[i]);
        else
            User_input[i] = tolower(User_input[i]);
    }

}
//*************************************************************
```

```
/*****************************************************
Erick Sanchez
CoSci 575
SortAndSearch.cpp
Shows 20 names in alphabetical order and lets users
search for names in the list.
*****************************************************/
```

```
int main()
{
    cout << "The names in sorted order are: ";

    selectionSort(nameList, SIZE);
    cout << endl << endl;
    displayNames(nameList, SIZE);

    while (toupper(goAgain) == 'Y')
    {
        cout << "Type the name to search (Last name, first name): " << endl;
        cin >> lastName;
        cin.ignore(100, ' ');
        cin >> firstName;
        upperCaseIt(nameSearch);
        binarySearch(nameList, SIZE, nameSearch);
        cout << endl;
        cout << "Another name search? (Y/N) ";
        cin >> goAgain;
        cout << endl;
    }
}
```

```
//capitalizes first letter in first and last name
string upperCaseIt(const string)
{

    firstName[0] = toupper(firstName[0]);
    for (int i = 1; i < firstName.length(); i++)
    {
        firstName[i] = tolower(firstName[i]);
    }
    lastName[0] = toupper(lastName[0]);
    for (int i = 1; i < lastName.length(); i++)
    {
        lastName[i] = tolower(lastName[i]);
    }
    nameSearch = lastName + " " + firstName;
    return nameSearch;

}
```

```
/* this program to sort and display the names in alphabet order
 * Ahmad shah
 *  CSIT 575
 */
```

```
// Called by main; passed a string being search. Convert the first character of
// the first and last name of the string passed in to uppercase only
string upperCaseIt(const string name)
{
    string nm = "";

    nm += toupper(name[0]);

    for (int i = 1; i < name.size(); i++)
    {
        if (name[i] != ',')
        {
            nm += tolower(name[i]);
        }
        else
        {
            nm += ", ";
            i = i + 2;
            nm += toupper(name[i]);
        }
    }
    return nm;
}
```

```cpp
// Brett Bass
#include <iostream>
#include <string>
#include <cctype>

using namespace std;

void   displayNames(const string arr[], int SIZE);
void   selectionSort(string arr[], int SIZE);
string upperCaseIt(const string name);
bool   binarySearch(const string arr[], int SIZE, string);

int main() {
    const int SIZE = 20;
    string name;
    char cont;
    string arr[SIZE] = { "Collins, Bill", "Smith, Bart", "Michalski, Joe",
        "Griffin, Jim","Sanchez, Manny", "Rubin, Sarah", "Taylor, Tyrone",
        "Johnson, Jill","Allison, Jeff", "Moreno, Juan", "Wolfe, Bill",
        "Whitman, Jean","Moretti, Bella", "Wu, Hong", "Patel, Renee",
        "Harrison, Rose","Smith, Cathy", "Conroy, Pat", "Kelly, Sean", "Holland, Beth" };
    selectionSort(arr, SIZE);
    displayNames(arr, SIZE);
    do {
        cout << "Type the name to search (Last name, first name):\n";
        getline(cin, name); //must be cleared before use in any loop
        name = upperCaseIt(name);
        if (!binarySearch(arr, SIZE, name)) { //bool value function
            cout << name << " was NOT found in the array\n";
        }
        else
            cout << name << " was found in the array\n";
        cout << "Another name search? (Y/N)";
        cin >> cont;
        cin.ignore(); //clears user input for getline
    } while (cont != 'n' && cont != 'N');
    system("pause");
    return 0;
}
```

```cpp
string upperCaseIt(const string name) {
    int i = 0;
    string upperCaseName = name;
    while (name[i]) { //makes entire string lowercase
        upperCaseName[i] = tolower(upperCaseName[i]); //manipulates as a char
        i++;
    }
    int spaceLocation = name.find(" ", 0); //finds the space
    upperCaseName[0] = toupper(upperCaseName[0]);

    //char after space set to upper
    upperCaseName[spaceLocation + 1] = toupper(upperCaseName[spaceLocation + 1]);
    return upperCaseName;
}
```