**5 points – Due April 6, 3pm**

Please enter the last name, first name, and Wayne State six-character access ID for each individual who actually joined and participated in the breakout room mission:

|  |  |  |  |
| --- | --- | --- | --- |
| Member | Last name | First name | Access ID |
| **1** | Lange | Rory | Hc9332 |
| **2** | Ahmed | Ashraf | Gy2352 |
| **3** | Dadah | Amro | Hd5730 |
| **4** | Nguyen | Johnny | Fp4550 |
| **5** | Zheng | Kerry | Hd7673 |
| **6** |  |  |  |

You've been hired by *Name Droppers* to write a code snippet that declares a string array using an initializer list with five first names, prompts the user for a first name, searches an array for the name, and prints whether it was found or not. Use the following two existing functions:

string firstName()

{

string name;

cout << "Enter a first name: ";

getline(cin, name);

return name;

}

int linearSearch(string array[], int arraySize, string key)

{

// Declare variables

int index = 0;

// Loop to validate dimension

while (index < arraySize && array[index] != key)

index = index + 1;

// Return index

if (index == arraySize)

return -1;

else

return index;

}

1) Designate one member of your group to be the "scribe".

2) Have the scribe share their screen with the other group members.

3) Choose how to show your code. Code may be:

a) Written on paper and photographed.

OR

b) Entered in a text editor and screenshotted.

4) Create the code and paste it where indicated below.

5) Submit this Word document to Canvas (one submission per group). You're done! You may leave the Zoom breakout room and session.

//mission 5 created by Ashraf Ahmed, Rory Lange, Johnny Nguyen, and Amro Dadah

// 4/6/21

#include <cstdlib>  // For several general-purpose functions

#include <fstream>  // For file handling

#include <iomanip>  // For formatted output

#include <iostream>  // For cin, cout, and system

#include <string>  // For string data type

using namespace std;  // So "std::cout" may be abbreviated to "cout"

string firstName()

{

  string name;

  cout << "Enter a first name: ";

  getline(cin, name);

  return name;

}

int linearSearch(string array[], int arraysize, string key) {

    //declare variables

    int index = 0;

    //loop to validate dimension

    while (index < arraysize && array[index] != key)

        index++;

    //return index

    if (index == arraysize)

        return -1;

    else

        return index;

}

int main() {

    string names[5];

    string search;

    int searchIndex;

    for (int i = 0; i < 5; i++) {

        names[i] = firstName();

    }

    cout << "Name search: ";

    getline(cin, search);

    searchIndex = linearSearch(names, 5, search);

    if (searchIndex == -1)

        cout << "The name is not in the array." << endl;

    else

        cout << "The name " << search << " is in the array at index " << searchIndex << endl;

}