```
**************************************************
*   PROGRAMMED BY : Carlos Aguilera
*   CLASS         : CS1B
*   SECTION       : MW: 7:30p - 9:50p
*   LAB #4        : Intro to Arrays
**************************************************

Enter name #1: Joe
Enter name #2: Sally
Enter name #3: Joe
Enter name #4: Sue
Enter name #5: Sally
Enter name #6: Adam
Enter name #7: Joe
Enter name #8: Adam
Enter name #9: Adam
Enter name #10: Joe

Who do you want to search for(enter done to exit)? Joe
There are 4 instances of the name Joe.

Who do you want to search for(enter done to exit)? Sally
There are 2 instances of the name Sally.

Who do you want to search for(enter done to exit)? Adam
There are 3 instances of the name Adam.

Who do you want to search for(enter done to exit)? Sue
There is one instance of the name Sue.

Who do you want to search for(enter done to exit)? John
John's name does not exist in the list.

Who do you want to search for(enter done to exit)? done
Thank you for using my program!
```

```
#pragma once
#include <iostream>
#include <string>
#include <iomanip>

void printHeading();//prints heading to the console
```

```cpp
#include "main.hpp"

void printHeading()
{
   /*****************************************************************************
    * CONSTANTS
    * ---------------------------------------------------------------------------
    * OUTPUT - USED FOR CLASS HEADING
    * ---------------------------------------------------------------------------
    * PROGRAMMER : Programmer's Name
    * CLASS      : Student's Course
    * SECTION    : Class Days and Times
    * LAB_NUM    : Lab Number (specific to this lab)
    * LAB_NAME   : Title of the Lab
    *****************************************************************************/
  const char PROGRAMMER[] = "Carlos Aguilera";
  const char CLASS[]      = "CS1B";
  const char SECTION[]    = "MW: 7:30p - 9:50p";
  const int LAB_NUM       = 4;
  const char LAB_NAME[]   = "Intro to Arrays";

  // (variable declerations go here)


  /*****************************************************************************
   * OUTPUT - Class Heading
   *****************************************************************************/
  std::cout << std::left;
  std::cout << "*************************************************\n";
  std::cout << "*   PROGRAMMED BY : " << PROGRAMMER << std::endl;
  std::cout << "*   " << std::setw(14) <<"CLASS" << ": " << CLASS <<
std::endl;
  std::cout << "*   " << std::setw(14) <<"SECTION" << ": " << SECTION <<
std::endl;
  std::cout << "*   LAB #" << std::setw(9) << LAB_NUM << ": " << LAB_NAME <<
std::endl;
  std::cout << "*************************************************\n\n";
  std::cout << std::right;
}
```

```cpp
/*****************************************************************************
 * AUTHOR      : Carlos Aguilera
 * STUDENT ID  : 1152562
 * LAB #4      : Intro to Arrays
 * CLASS       : CS1B
 * SECTION     : M-W
 * DUE DATE    : 02.16.22
 *****************************************************************************/

#include "main.hpp"

/*****************************************************************************
 * Title: Intro to Arrays
 * ---------------------------------------------------------------------------
 * This program will take 10 name inputs from the keyboard and console out
 * how many instances there were of a certain name chosen by the user.
 * ---------------------------------------------------------------------------
 * const int AR_SIZE {10}; CALC - How big the array needs to be
 * std::string names[AR_SIZE]; - holds array of names type is string
 * std::string inputName {}; IN & CALC - input of name to be found
 * int inputNameInstances {0}; CALC - calculates how many instances of a name
was found
 *****************************************************************************/
const int AR_SIZE {10};
int main()
{
    printHeading();

    std::string names[AR_SIZE];
    for(size_t i {0}; i < AR_SIZE; i++) // This for loop is going to take all
ten inputs and store a name in each element
    {
        std::cout << "Enter name #" << i+1 << ": ";
        std::cin >> names[i];
    }

    std::string inputName {};
    do
    {
        std::cout << "\nWho do you want to search for(enter done to exit)? ";
        std::cin >> inputName;

        if(inputName != "done")
        {
            int inputNameInstances {0};
            for(auto name : names)
                if(inputName == name)//if the input name equals current name
in the array then we increment inputNameInstances
                    ++inputNameInstances;

            if(inputNameInstances > 1)//execption handling on different
outputs
                std::cout << "There are " << inputNameInstances << " instances
of the name " << inputName << ".\n";
            else if(inputNameInstances == 1)
                std::cout << "There is one instance of the name " << inputName
<< ".\n";
            else if(inputNameInstances == 0)
```

```
                std::cout << inputName << "'s name does not exist in the
list.\n";
        }

    } while (inputName != "done");

    std::cout << "Thank you for using my program!\n";
    return 0;
}
```