

```

Script started on 2024-02-28 22:19:22-06:00 [TERM="xterm-256color" TTY="/dev/pts/0" COLUMNS="252" LINES="58"]
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Lab/Lab_11[01;32mjovyan@jupyter-tes4j[00m:[01;34m~/CS2/Lab/Lab_11[00m$ pwd
[?2004l
/home/jovyan/CS2/Lab/Lab_11
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Lab/Lab_11[01;32mjovyan@jupyter-tes4j[00m:[01;34m~/CS2/Lab/Lab_11[00m$ la[Ks -la
[?2004l
total 16
drwxr-sr-x  3 jovyan users 4096 Feb 28 22:19 [0m[01;34m.[0m
drwxr-sr-x 14 jovyan users 4096 Feb 28 18:06 [01;34m..[0m
-rw-r--r--  1 jovyan users 1696 Feb 28 22:18 grade_compare.cpp
drwxr-sr-x  2 jovyan users 4096 Feb 28 22:19 [01;34m.ipynb_checkpoints[0m
-rw-r--r--  1 jovyan users   0 Feb 28 22:19 Sabin_Lab_11.log
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Lab/Lab_11[01;32mjovyan@jupyter-tes4j[00m:[01;34m~/CS2/Lab/Lab_11[00m$ cat -n
Sabin_Lab[K[K[K[K[K[K[K[K[K[Kgrade_compare.cpp
[?2004l
 1  /*
 2  Tyler Sabin
 3  Section 004
 4  Lab 11
 5  */
 6
 7  #include <iostream>
 8  #include <array>
 9  #include <string>
10
11  //Declare global variables
12  const int kMaxSize_Arr1{5};
13  const int kMaxSize_Arr2{5};
14
15  //Define function prototypes
16  std::array<double,kMaxSize_Arr1> GetGrades();
17  bool GradesAreSame(std::array <double,kMaxSize_Arr1> arr1, std::array <double,kMaxSize_Arr2> arr2);
18
19  int main(){
20
21      //Declare array variables & bool variable
22      std::array <double,kMaxSize_Arr1> array1{};
23      std::array <double,kMaxSize_Arr2> array2{};
24      bool gradeSame{};
25
26      std::cout << "Getting Student One" << '\n';
27      //Call get grade function to store grades in an array
28      array1 = GetGrades();
29      std::cout << "Getting Student Two" << '\n';
30      array2 = GetGrades();
31      //Call bool function
32      gradeSame = GradesAreSame(array1,array2);
33      std::cout << '\n';
34
35      if(gradeSame == true){
36          std::cout << "Both students have the SAME grades!" << '\n';
37      } else{
38          std::cout << "Both students have the DIFFERENT grades!" << '\n';
39      }
40
41
42      return 0;
43  }
44
45
46  std::array<double,kMaxSize_Arr1> GetGrades(){
47      //Declare local array and variable for grades
48      std::array <double,kMaxSize_Arr1> locArray{};
49      double tempGrade{};
50      //For loop to collect grade and store it in the array index
51      for(int i{0}; i < kMaxSize_Arr1; i++){
52          std::cout << "Enter grade: ";
53          std::cin >> tempGrade;
54          locArray[i] = tempGrade;
55      }
56      //Return array
57      return locArray;
58  }
59
60  bool GradesAreSame(std::array <double,kMaxSize_Arr1> arr1, std::array <double,kMaxSize_Arr2> arr2){
61      //Test to see if the arrays are the same
62      if(arr1 == arr2){
63          return true;
64      } else{
65          return false;
66      }
67  }[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Lab/Lab_11[01;32mjovyan@jupyter-tes4j[00m:[01;34m~/CS2/Lab/Lab_11[00m$
g++ -Wall -Wextra -Werror grade_compare.cpp -o compare

```

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[?2004l
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Lab/Lab_11[01;32mjovyan@jupyter-tes4j[00m:[01;34m~/CS2/Lab/Lab_11[00m$ ./compare
[?2004l
Getting Student One
Enter grade: 5
Enter grade: 5
Enter grade: 6
Enter grade: 6
Enter grade: 7
Getting Student Two
Enter grade: 5
Enter grade: 5
Enter grade: 6
Enter grade: 6
Enter grade: 7

Both students have the SAME grades!
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Lab/Lab_11[01;32mjovyan@jupyter-tes4j[00m:[01;34m~/CS2/Lab/Lab_11[00m$ ./compare
[?2004l
Getting Student One
Enter grade: 100.00
Enter grade: 98.87
Enter grade: 87.00
Enter grade: 77.98
Enter grade: 33.23
Getting Student Two
Enter grade: 100.00
Enter grade: 97.87
Enter grade: 33.23
Enter grade: 87.00
Enter grade: 77.98

Both students have the DIFFERENT grades!
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Lab/Lab_11[01;32mjovyan@jupyter-tes4j[00m:[01;34m~/CS2/Lab/Lab_11[00m$ ./compare
[?2004l
Getting Student One
Enter grade: 98.2
Enter grade: 88.3
Enter grade: 77.6
Enter grade: 100.2
Enter grade: 98.1
Getting Student Two
Enter grade: 98.2
Enter grade: 88.3
Enter grade: 77.6
Enter grade: 100.2
Enter grade: 98

Both students have the DIFFERENT grades!
[?2004h(base) ]0;jovyan@jupyter-tes4j: ~/CS2/Lab/Lab_11[01;32mjovyan@jupyter-tes4j[00m:[01;34m~/CS2/Lab/Lab_11[00m$ exit
[?2004l
exit

Script done on 2024-02-28 22:22:06-06:00 [COMMAND_EXIT_CODE="0"]
```