// C++ program to compare two Strings

// using Operator Overloading ==, >=, <=

 #include <cstring>

#include <iostream>

#include <string.h>

**using** **namespace** std;

 // Class to implement operator overloading

// function for concatenating the strings

**class** CompareString {

**public**:

    // Classes object of string

**char** str[25];

    // Parameterized Constructor

    CompareString(**char** str1[])

    {

        // Initialize the string to class object

**strcpy**(**this**->str, str1);

    }

    // Overloading '==' under a function

**int** operator==(CompareString s2)

    {

**if** (**strcmp**(str, s2.str) == 0)

**return** 1;

**else**

**return** 0;

    }

     // Overloading '<=' under a function

    //

**int** operator<=(CompareString s3)

    {

**if** (**strlen**(str) <= **strlen**(s3.str))

**return** 1;

**else**

**return** 0;

    }

    // Overloading '>=' under a function

**int** operator>=(CompareString s3)

    {

**if** (**strlen**(str) >= **strlen**(s3.str))

**return** 1;        **else**

**return** 0;

    }

};

**void** compare(CompareString s1, CompareString s2)

{     **if** (s1 == s2)

        cout << s1.str << " is equal to "

             << s2.str << endl;

**else** {

        cout << s1.str << " is not equal to "

             << s2.str << endl;

**if** (s1 >= s2)

            cout << s1.str << " is greater than "

                 << s2.str << endl;

**else**

            cout << s2.str << " is greater than "

                 << s1.str << endl;

    }

}

 // Testcase1

**void** testcase1()

{    // Declaring two strings

**char** str1[] = "object";

**char** str2[] = "class";

     // Declaring and initializing the class

    // with above two strings using the constructor

    CompareString s1(str1);

    CompareString s2(str2);

    cout << "Comparing \"" << s1.str << "\" and \""

         << s2.str << "\"" << endl;

     compare(s1, s2);

} // Testcase2

**void** testcase2()

{    // Declaring two strings

**char** str1[] = "class";

**char** str2[] = "class";

     // Declaring and initializing the class

    // with above two strings

    CompareString s1(str1);

    CompareString s2(str2);

     cout << "\n\nComparing \"" << s1.str << "\" and \""

         << s2.str << "\"" << endl;

     compare(s1, s2);

}

 // Driver code

**int** main()

{

    testcase1();

    testcase2();

**return** 0;

}