

How can strings be compared in R?

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Strings in R can be compared using various string comparison operators such as "==" , "!=", "", "=",. These operators allow for the comparison of two strings based on their characters and their alphabetical order. Additionally, the "grep" function can be used to find specific patterns within strings. String comparison in R is case-sensitive, meaning that uppercase and lowercase letters are considered different. However, the "tolower" function can be used to convert strings to lowercase before comparison. Overall, string comparison in R allows for the efficient and accurate comparison of strings for various data analysis and manipulation purposes.

Compare Strings in R (3 Examples)

You can use the following methods to compare strings in R:

Method 1: Compare Two Strings

#case-sensitive comparison

string1 == string2

#case-insensitive comparison

tolower(string1) == tolower(string2)

Method 2: Compare Two Vectors of Strings

#case-sensitive comparison

identical(vector1, vector2)

#case-insensitive comparison

identical(tolower(vector1), tolower(vector2))

Method 3: Find Similarities Between Two Vectors of Strings

```
#find which strings in vector1 are also in vector2  
vector1
```

The following examples show how to use each method in practice.

Example 1: Check if Two Vectors Are Identical

The following code shows how to compare two strings in R to determine if they're equal:

```
#define two strings  
string1 <- "Mavericks" string2 <- "mavericks"
```

```
#case-sensitive comparison  
string1 == string2
```

FALSE

```
#case-insensitive comparison  
tolower(string1) == tolower(string2)
```

TRUE

The case-sensitive comparison returns a value of **FALSE** since the two strings are not perfectly identical.

However, the case-insensitive comparison returns a value of **TRUE** since the two strings contain the same characters in the same order, regardless of case.

Example 2: Compare Two Vectors of Strings

The following code shows how to use the `identical()` function to determine if two vectors of strings are equal:

```
#define two vectors of strings  
vector1 <- c("hey", "hello", "HI")  
vector2 <- c("hey", "hello", "hi")
```

```
#case-sensitive comparison  
identical(vector1, vector2)
```

FALSE

```
#case-insensitive comparison  
identical(tolower(vector1), tolower(vector2))
```

TRUE

The case-sensitive comparison returns a value of **FALSE** since the two vectors don't contain the exact same strings in the same case.

Example 3: Find Similarities Between Two Vectors of Strings

The following code shows how to use the `%in%` operator to find which strings in one vector belong to another vector:

```
#define two vectors of strings
vector1 <- c("hey", "hello", "greetings")
vector2 <- c("hey", "hello", "hi")

#find which strings in vector1 are also in vector2
vector1

"hey" "hello"
```

From the output we can see that the strings "hey" and "hello" exist in both vector1 and vector2.

Related:

Additional Resources