String Basics:

Create a string variable called my\_string with the value "Hello, R!".

String Manipulation:

Concatenate the strings "Data" and "Analysis" to form a new string.

Substring Extraction:

Extract the substring "programming" from the string "R programming".

String Length:

Determine the length of the string "DataScience123".

String Case Conversion:

Convert the string "lowercase" to uppercase.

String Comparison:

Compare two strings, "apple" and "orange", and check if they are equal.

String Splitting:

Split the string "Data,Analysis,Machine,Learning" into a vector of separate words.

Replacing Substrings:

Replace all occurrences of the word "red" with "blue" in the string "The red car is faster than the red balloon."

String Searching:

Check if the word "programming" is present in the string "I love programming in R."

String Formatting:

Create a formatted string using the variables name and age with values "John" and 25, respectively. The output should be "My name is John, and I am 25 years old."

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These questions cover various aspects of working with strings in R, including basic operations, manipulation, extraction, comparison, and formatting. Adjust the complexity based on the level of proficiency you are testing.

User

array questions

ChatGPT

Certainly! Here are some machine test questions for assessing knowledge of arrays in R:

Creating Arrays:

Create a 3x3 matrix named my\_matrix with values ranging from 1 to 9.

Accessing Elements:

Access the element in the second row and third column of my\_matrix.

Array Operations:

Create a new array by adding 5 to each element of my\_matrix.

Array Dimension:

Determine the dimensions of the array created in question 3.

Array Indexing:

Create a vector named my\_vector with values 10, 20, 30. Use this vector to replace the second column of my\_matrix.

Array Reshaping:

Reshape the array my\_matrix into a vector.

Array Functions:

Calculate the mean and standard deviation of the elements in my\_matrix.

Subsetting Arrays:

Create a new array named subset\_matrix that includes only the first and third columns of my\_matrix.

Array Comparison:

Compare each element in my\_matrix with 7 and return a logical matrix.

Array Concatenation:

Concatenate my\_matrix with its transpose to create a new square matrix.