String Methods Tasks

1. Write a program to use the `length()` method and find the length of a given string.
2. Demonstrate the use of `concat()` by combining two strings and printing the result.
3. Create a string and print the character at index 3 using the `charAt()` method.
4. Extract a substring from the 3rd to the 8th character of a string using the `substring()` method.
5. Convert a mixed-case string to both lowercase and uppercase using `toLowerCase()` and `toUpperCase()` methods.
6. Trim leading and trailing spaces from a string and print the result using the `trim()` method.
7. Replace all occurrences of a space in a string with an underscore using the `replace()` method.
8. Compare two strings using `equals()` and print whether they are equal.
9. Find the index of the first and last occurrence of a specific character in a string using `indexOf()` and `lastIndexOf()`.

Array Methods Tasks

1. Create two integer arrays and compare them lexicographically using the `compare()` method. Print the result.
2. Copy the contents of an array into a new array with an extended length using `copyOf()` and print the resulting array.
3. Create two multidimensional arrays and check if they are deeply equal using `deepEquals()`.
4. Compare two arrays element-by-element using the `equals()` method and print whether they are the same.
5. Use the `fill()` method to fill an array of size 5 with the value `7` and print the resulting array.
6. Find the first index where two arrays differ using the `mismatch()` method and print the index.

7. Sort an integer array and a character array using the `sort()` method, and print both sorted arrays.