

## Aufgabe 12.02.2025

1. What will the following code output? Why?

```
String s1 = "Java ist toll";
String s2 = "Java ist toll";
System.out.println(s1 == s2);

String s3 = "Java ist " + "toll";
System.out.println(s1 == s3);

String s4 = new String("Java ist toll");
System.out.println(s2 == s4);

String s5 = "!";
String s6 = s2+s5;
String s7 = s2+s5;
System.out.println(s6==s7);
```

Explanation:

2.

Gegeben ist folgender Code. Was muss in Zeile 2 eingesetzt werden, damit „v“ in der Konsole ausgegeben wird?

```
String s = "Java ist toll";
//Zeile 2
System.out.println(result);
```

- a. char result = s[2];
- b. char result = s[3];
- c. char result = s.charAt(2);
- d. char result = s.charAt(3);

3. What does the indexOf method of the String class do? What happens if the method finds nothing? Provide examples and explain them.

4. What is the output of the following code snippet, and why is that the case?

```
String s = "Java ist toll";
boolean result = s.contains("Toll");
System.out.println(result);
```

5. How can you remove spaces before and after a word in Java? Find a suitable method in the String class.

6. Write a method `getEndergebnisAppend(String s, String s1)` that creates a `StringBuilder`, appends `s` and `s1` together, and returns the result.
7. Write a method `appendMehrereStrings(String[] arr)` that appends multiple string values from an array (`String[] arr = {"Hallo", " ", "Welt", "!", " Wie", " geht's?"}`) to a `StringBuilder` and prints the result.
8. Write a method `getEndergebnisReverse(String s, String s2)` that joins both strings using a `StringBuilder` and then outputs the text in reverse. Example: "Hello Welt!" → "!tleW olleH"
9. Write a method `getEndergebnisInsert(String s, String s2)` that creates the text "HalloWelt" and inserts a space between "Hallo" and "Welt".
10. Write a method `reverseEveryWord` that takes a sentence as a parameter. Each letter in each word should be reversed, while the word order remains the same. Example: "Hallo Welt" becomes "ollaH tleW".