

Home Assignment <2>: Remove Duplicate Words in a String

Learning Objective:

Understand the concepts of String manipulation and control statements in Java to remove duplicate words in a String.

Expected Completion Time:

Best Case: 15 minutes Average Case: 20 minutes

Assignment Details:

Remove the duplicate words from a String with the input:

String text = "We learn Java basics as part of java sessions in java week1";

Expected output: "We learn Java basics as part of sessions in week1"

Assignment Requirements:

- Initialize a variable 'count' to keep track of the number of duplicate words found
- Split the text into an array of words using space as the delimiter
- Create two nested for loops to compare each word with every other word in the String array.
- If a duplicate word is found, it is replaced with an empty string and the count is incremented.
- After comparing all words, if the count is greater than 1 (indicating at least one duplicate was found), it prints the modified words array where duplicates have been replaced with empty strings.

Hints to Solve:

- If the count is greater than 1, use another for loop to print the modified String array where duplicates have been replace with empty strings.
- Use the appropriate method for case-insensitive string comparisons.

Reference Links:

String in Java - Oracle Doc

Expected Outcome:

Upon completion, you should be able to:

- Showcase basic String manipulation and algorithmic thinking.
- Understand how to use loops and conditional statements to perform a specific task, such as removing duplicate words from a text.