Write a Java Program to count the number of words in a string using Hash Map.

CODE:

import java.util.HashMap;

import java.util.Map;

public class WordCount {

public static void main(String[] args) {

String sentence = "This is a sample sentence to count the number of words in a string using HashMap";

// Remove leading and trailing whitespace, and split the sentence into words

String[] words = sentence.trim().split("\\s+");

// Create a HashMap to store word counts

Map<String, Integer> wordCountMap = new HashMap<>();

// Iterate through the words and update the word count in the HashMap

for (String word : words) {

wordCountMap.put(word, wordCountMap.getOrDefault(word, 0) + 1);

}

// Print the word count for each word

System.out.println("Word count:");

for (Map.Entry<String, Integer> entry : wordCountMap.entrySet()) {

System.out.println(entry.getKey() + ": " + entry.getValue());

}

// Total number of words in the sentence

int totalWords = words.length;

System.out.println("\nTotal number of words: " + totalWords);

}

}

OUTPUT:

C:\javap>javac WordCount.java

C:\javap>java WordCount

Word count:

sentence: 1

a: 2

using: 1

string: 1

in: 1

HashMap: 1

count: 1

words: 1

is: 1

sample: 1

the: 1

number: 1

of: 1

This: 1

to: 1

Total number of words: 16

