1. Write a Java program to find distinct characters and their count in a string.

CODE:

import java.util.HashMap;

public class DistinctCharactersCount {

public static void main(String[] args) {

String inputString = "hello world";

// Create a HashMap to store characters and their counts

HashMap<Character, Integer> charCountMap = new HashMap<>();

// Iterate through the characters of the input string

for (char c : inputString.toCharArray()) {

// Ignore spaces

if (c == ' ') {

continue;

}

// Update the count for each character

charCountMap.put(c, charCountMap.getOrDefault(c, 0) + 1);

}

// Print distinct characters and their counts

System.out.println("Distinct characters and their counts:");

for (char c : charCountMap.keySet()) {

System.out.println(c + ": " + charCountMap.get(c));

}

}

}

OUTPUT:

C:\javap>javac DistinctCharactersCount.java

C:\javap>java DistinctCharactersCount

Distinct characters and their counts:

r: 1

d: 1

e: 1

w: 1

h: 1

l: 3

o: 2

