

1) Name of the Course: Object Oriented Programming

2) Name of the Faculty: Dr. P. A. Bailke

3) Innovative method practiced: Solved programming challenges on platforms like Hacker Rank

Such exercise has improved analytical as well as coding skills of students.

Example problem: [URL: <https://www.hackerrank.com/challenges/java-string-compare/problem?isFullScreen=true>]

We define the following terms:

Lexicographical Order, also known as alphabetic or dictionary order, orders characters as follows:

For example, ball < cat, dog < dorm, Happy < happy, Zoo < ball.

A substring of a string is a contiguous block of characters in the string. For example, the substrings of abc are a, b, c, ab, bc, and abc.

Given a string, `s`, and an integer, `k`, complete the function so that it finds the lexicographically smallest and largest substrings of length `k`.

Function Description

Complete the `getSmallestAndLargest` function in the editor below.

`getSmallestAndLargest` has the following parameters:

string `s`: a string

int `k`: the length of the substrings to find

Returns

string: the string `' + "\n" + '` where `and` are the two substrings

Input Format

The first line contains a string denoting `s`.

The second line contains an integer denoting `k`.

Constraints consists of English alphabetic letters only (i.e., [a-zA-Z]).

Sample Input

welcometojava

3

Sample Output

ava

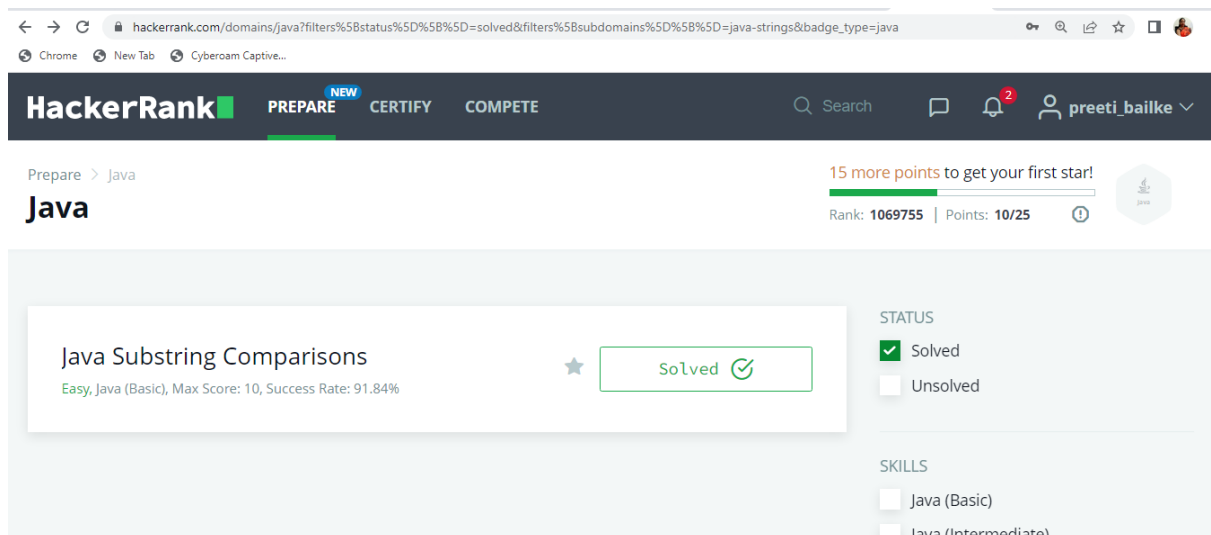
wel

Explanation

String `has` has the following lexicographically-ordered substrings of length `3` :

We then return the first (lexicographically smallest) substring and the last (lexicographically largest) substring as two newline-separated values (i.e., `ava\nwel`).

The stub code in the editor then prints `ava` as our first line of output and `wel` as our second line of output.



The screenshot shows a web browser window displaying the HackerRank profile and a problem page. The browser address bar shows the URL: `hackerrank.com/domains/java?filters%5Bstatus%5D%5B%5D=solved&filters%5Bsubdomains%5D%5B%5D=java-strings&badge_type=java`. The HackerRank header includes the logo, navigation tabs (PREPARE, CERTIFY, COMPETE), a search bar, and a user profile for 'preeti_bailke'. The profile section shows '15 more points to get your first star!' and a progress bar with 'Rank: 1069755 | Points: 10/25'. The main content area displays the problem 'Java Substring Comparisons' with a 'Solved' status and a success rate of 91.84%. The 'STATUS' section shows 'Solved' selected, and the 'SKILLS' section shows 'Java (Basic)' and 'Java (Intermediate)' as options.