LP_Practice_FindStringCode

Ramya.V | 06 Feb 2023

Test Name::

LP_Practice_FindStringCode

Finish State: Normal | Test Taken on: February 06, 2023 09:50:40 AM IST

R

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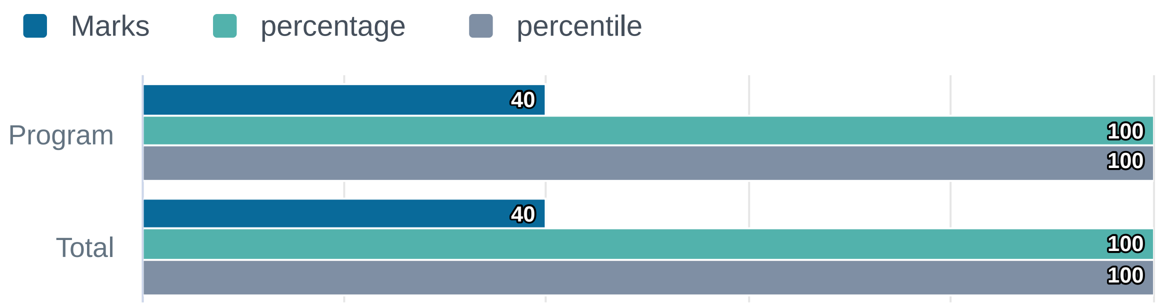
Overall Summary

40 Marks Scored out of 40	100 % 100 percentile out of 72717 Test Takers	1h 4m 23s Time taken of 1hr 20mins

Marks Scored



Attempt Summary

Distribution of questions attempted in a total of 1 question(s).

1
Total Questions

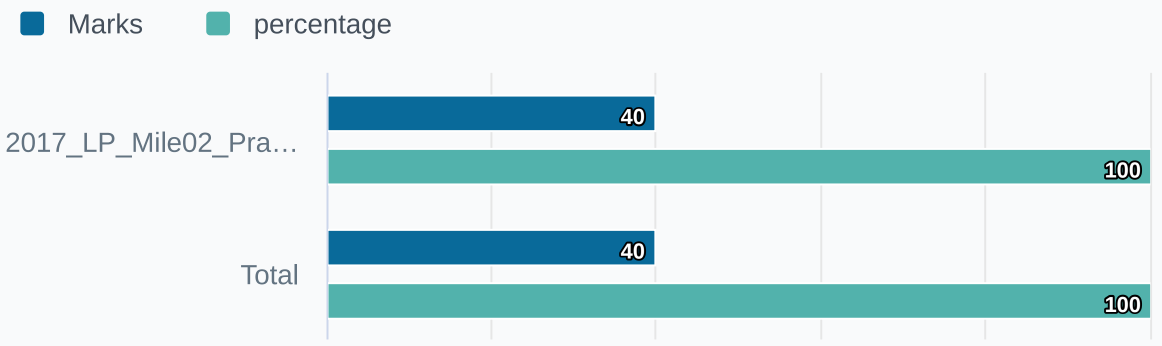
This shows the correctness of questions attempted by the test taker

🟦 Correct	1 Ques	40/40 Marks
🟥 Incorrect	0 Ques	0/0 Marks
🟦 Partially Correct	0 Ques	0/0 Marks
⬜ Not Attempted	0 Ques	0/0 Marks

Section-Wise Details

Section 1 Program	question(s) 1 Q.	Time taken 1h 4m 23s (Untimed)	Marks Scored 40 / 40

Marks Scored



Attempt Summary

Distribution of questions attempted in a total of 1 question(s).

1
Total Questions

This shows the correctness of questions attempted by the test taker

■	Correct	1 Ques	40/40 Marks

Test Log

6th Feb 2023

08:46 AM	Started the test with Program
09:06 AM	Away from test window
09:50 AM	Finished the test

About the Report

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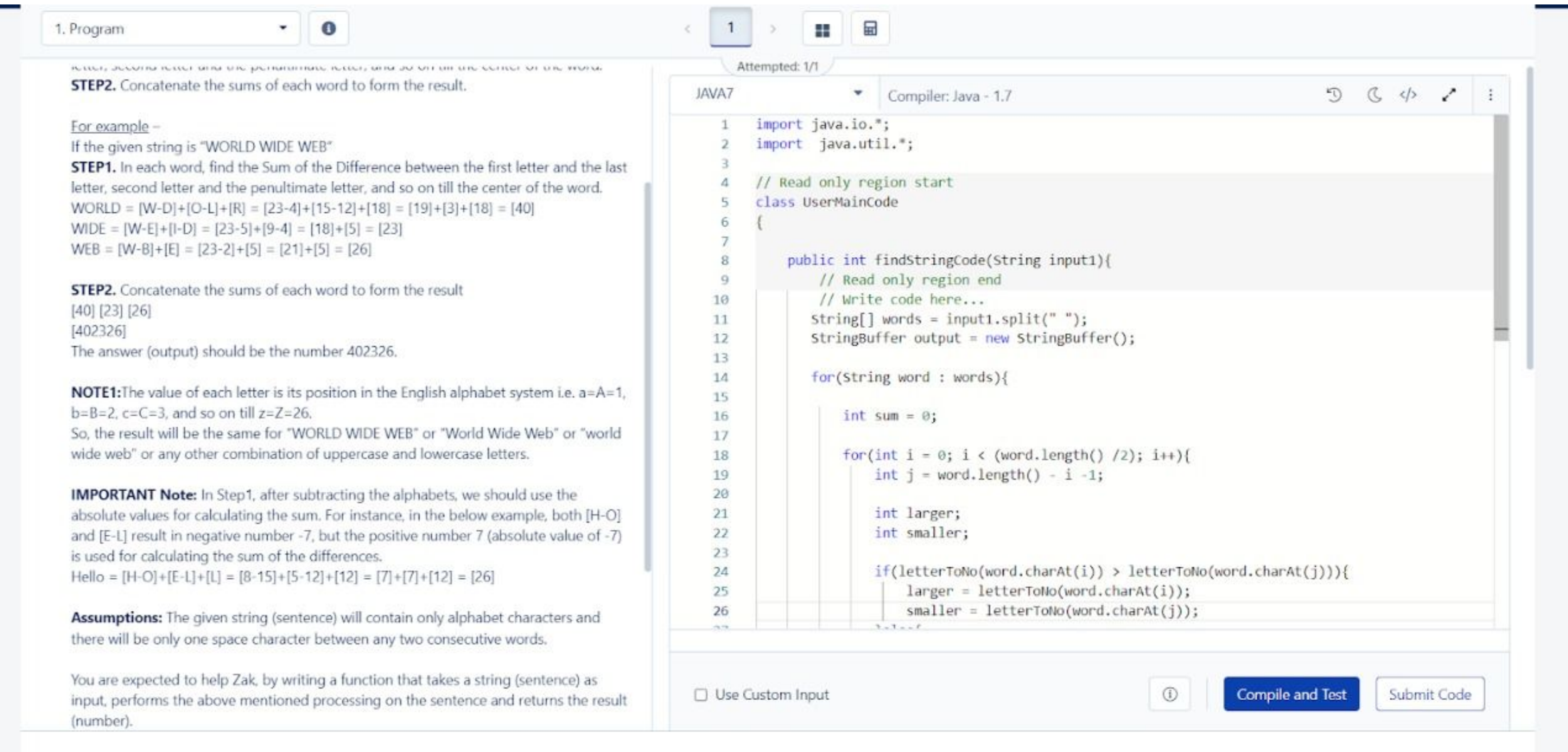


letter, second letter and the penultimate letter, and so on till the center of the word.

STEP2. Concatenate the sums of each word to form the result.

For example –
If the given string is "WORLD WIDE WEB"
STEP1. In each word, find the Sum of the Difference between the first letter and the last letter, second letter and the penultimate letter, and so on till the center of the word.
WORLD = [W-D]+[O-L]+[R] = [23-4]+[15-12]+[18] = [19]+[3]+[18] = [40]
WIDE = [W-E]+[I-D] = [23-5]+[9-4] = [18]+[5] = [23]
WEB = [W-B]+[E] = [23-2]+[5] = [21]+[5] = [26]

STEP2. Concatenate the sums of each word to form the result
[40] [23] [26]
[402326]
The answer (output) should be the number 402326.

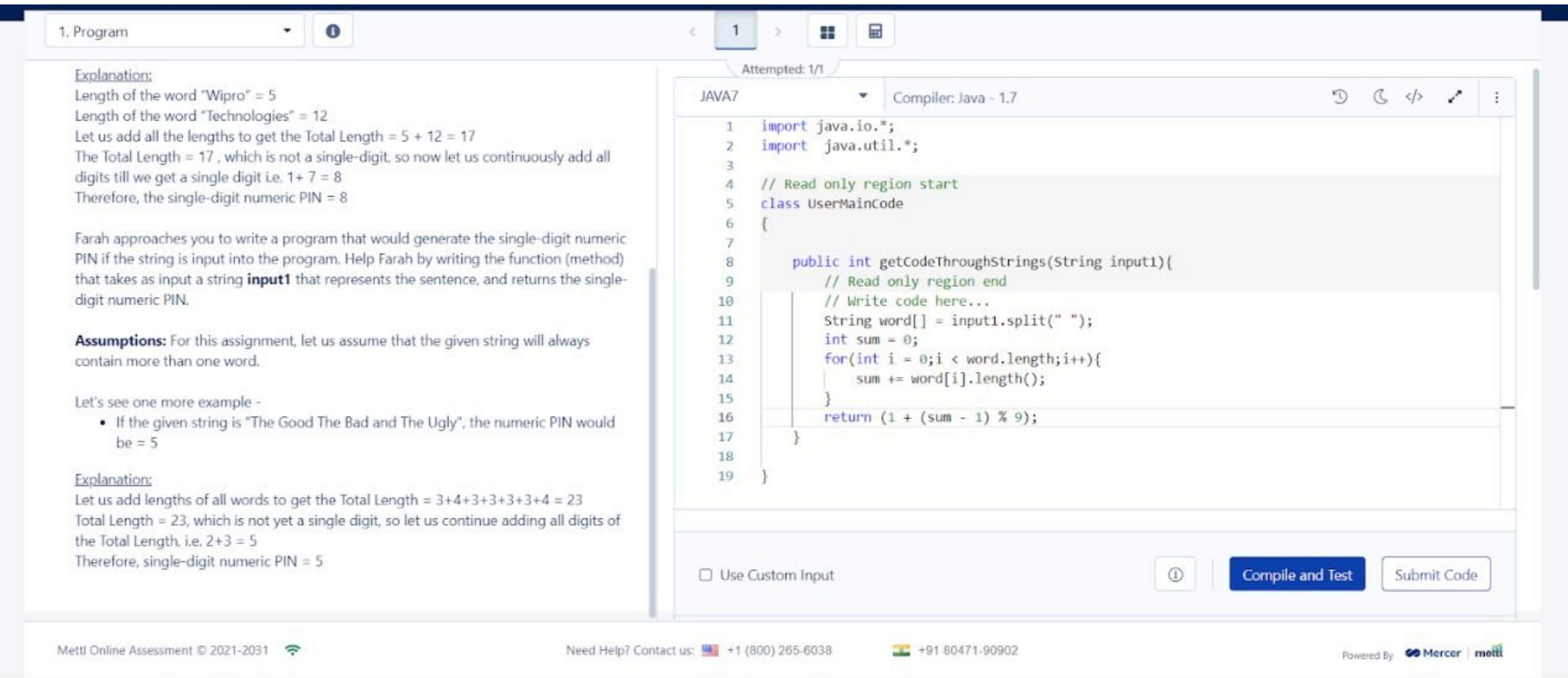
NOTE1: The value of each letter is its position in the English alphabet system i.e. a=A=1, b=B=2, c=C=3, and so on till z=Z=26.
So, the result will be the same for "WORLD WIDE WEB" or "World Wide Web" or "world wide web" or any other combination of uppercase and lowercase letters.

IMPORTANT Note: In Step1, after subtracting the alphabets, we should use the absolute values for calculating the sum. For instance, in the below example, both [H-O] and [E-L] result in negative number -7, but the positive number 7 (absolute value of -7) is used for calculating the sum of the differences.
Hello = [H-O]+[E-L]+[L] = [8-15]+[5-12]+[12] = [7]+[7]+[12] = [26]

Assumptions: The given string (sentence) will contain only alphabet characters and there will be only one space character between any two consecutive words.

You are expected to help Zak, by writing a function that takes a string (sentence) as input, performs the above mentioned processing on the sentence and returns the result (number).

```java
import java.io.*;
import  java.util.*;

// Read only region start
class UserMainCode
{

    public int findStringCode(String input1){
        // Read only region end
        // Write code here...
       String[] words = input1.split(" ");
       StringBuffer output = new StringBuffer();

       for(String word : words){

           int sum = 0;

           for(int i = 0; i < (word.length() /2); i++){
               int j = word.length() - i -1;

               int larger;
               int smaller;

               if(letterToNo(word.charAt(i)) > letterToNo(word.charAt(j))){
                   larger = letterToNo(word.charAt(i));
                   smaller = letterToNo(word.charAt(j));
```



Explanation:
Length of the word "Wipro" = 5
Length of the word "Technologies" = 12
Let us add all the lengths to get the Total Length = 5 + 12 = 17
The Total Length = 17 , which is not a single-digit, so now let us continuously add all digits till we get a single digit i.e. 1+ 7 = 8
Therefore, the single-digit numeric PIN = 8

Farah approaches you to write a program that would generate the single-digit numeric PIN if the string is input into the program. Help Farah by writing the function (method) that takes as input a string **input1** that represents the sentence, and returns the single-digit numeric PIN.

Assumptions: For this assignment, let us assume that the given string will always contain more than one word.

Let's see one more example -

- If the given string is "The Good The Bad and The Ugly", the numeric PIN would be = 5

Explanation:
Let us add lengths of all words to get the Total Length = 3+4+3+3+3+3+4 = 23
Total Length = 23, which is not yet a single digit, so let us continue adding all digits of the Total Length, i.e. 2+3 = 5
Therefore, single-digit numeric PIN = 5

```java
import java.io.*;
import  java.util.*;

// Read only region start
class UserMainCode
{

    public int getCodeThroughStrings(String input1){
        // Read only region end
        // Write code here...
        String word[] = input1.split(" ");
        int sum = 0;
        for(int i = 0;i < word.length;i++){
            sum += word[i].length();
        }
        return (1 + (sum - 1) % 9);
    }

}
```

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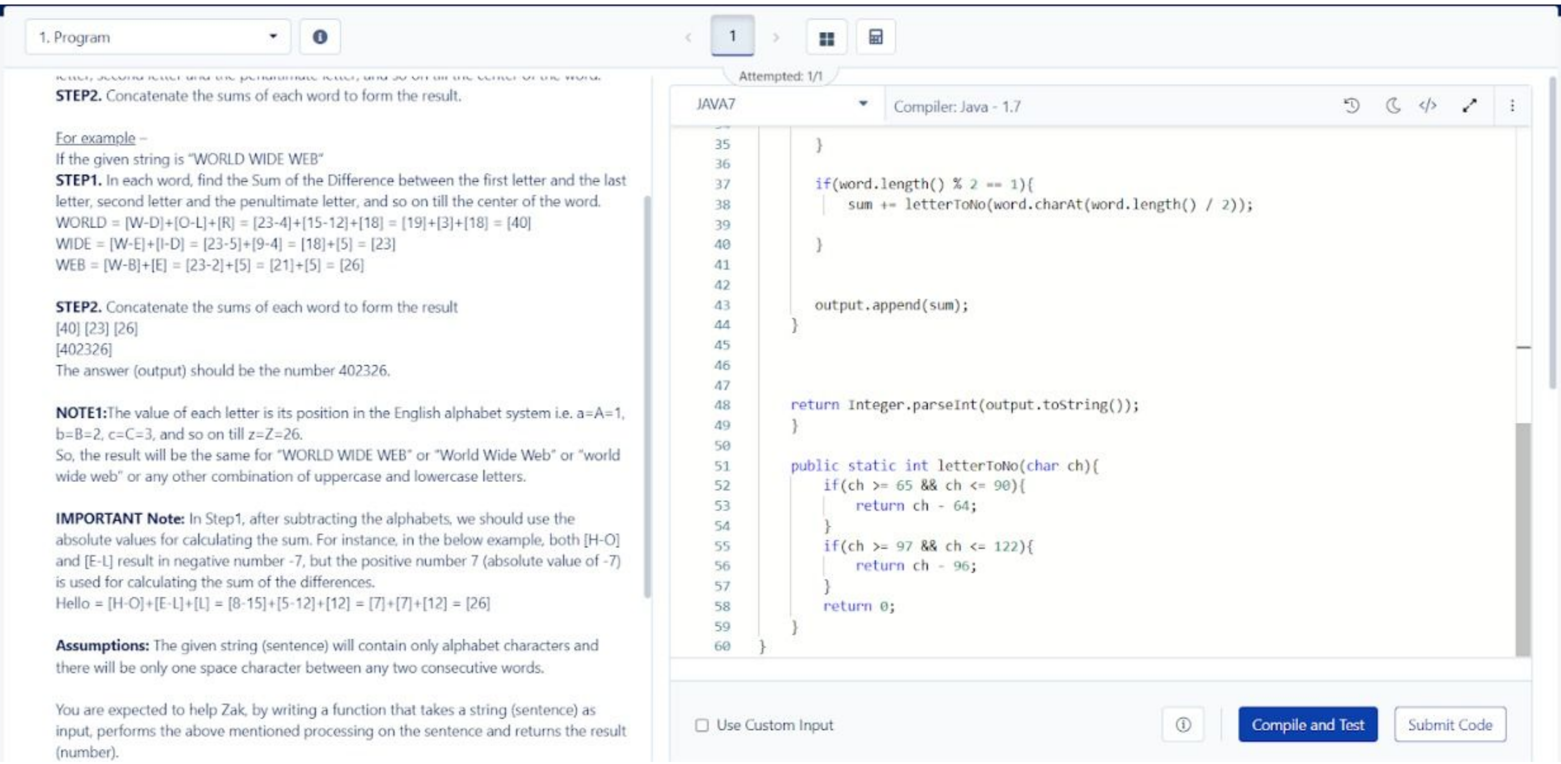

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```
        }

        if(word.length() % 2 == 1){
            sum += letterToNo(word.charAt(word.length() / 2));

        }


        output.append(sum);
    }



    return Integer.parseInt(output.toString());
    }

    public static int letterToNo(char ch){
        if(ch >= 65 && ch <= 90){
            return ch - 64;
        }
        if(ch >= 97 && ch <= 122){
            return ch - 96;
        }
        return 0;
    }
}
```