CodeVita
The TCS Global Coding Contest

Vipul Kumar

05 Hr 59 Min 48 Sec

- Guidelines
- Coding Area
- Editor | Compile & Run History
- Submissions
- Feedback Form
- Result
- Graphs

Coding Area

A B C D E F

ONLINE EDITOR (A)

Distinct Alphabets

Problem Description

We are all familiar with alpha numeric keypad that was used for messaging in earlier days. Given sequence of numbers 2-9 (both inclusive), find out the number of distinct alphabets that can be formed.

The rules of interpreting keypad strokes are as follows

1) Let"s understand with example. 25 can mean AJ but it can also mean pressing *button 5* two times. In that case it becomes K. See Examples section for better understanding.

2) Maximum number of distinct alphabets that can be formed cannot exceed 26

3) Alphanumeric keyboard used is as follows

· key 2 has letters "A B C"

· key 3 has letters "D E F"

· key 4 has letters "G H I"

· key 5 has letters "J K L"

· key 6 has letters "M N O"

· key 7 has letters "P Q R S"

· key 8 has letters "T U V"

· key 9 has letters "W X Y Z"

4) Input does not contain either 1 or 0 because no keypad buttons are associated with these numbers.

Constraints

1 <= Length of Input Literals <= 40

Input Format

Single Line contains a number with literals [2-9]

Output

Number of distinct alphabets after factoring all possible interpretations of the input

Explanation

Example 1

Input

253

Output

5

Explanation

It can be interpreted as AJD, KD , AE, thus distinct alphabets formed- A , J , D ,K , E = **5** distinct alphabets.

Example 2

Input

294

Output

5

Upload Solution [Question : A]

☐ I, **vipul kumar** confirm that the answer submitted is my own. ☐ Took help from online sources (attributions)

Choose a File ...