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/*
* PROBLEM STATEMENT: Write a program to accept a s
entence which may be terminated by either . Or ? o
nly.
* The words are to be separated by a single blank s
pace.
* Print an error message if the input does not term
inate with . Or ? only.
* You can assume that no word in the sentence exce
eds 15 characters, so that you get a proper format
ted output.
* Perform the following tasks:
* (i) Convert the first letter of each word to uppe
rcase.
* (ii) Find the number of vowels and consonants in
each word and display them with proper headings a
long with the words.
* AUTHOR: Soumyajit Pal
* LOGIC: Checking for validity of the sentence inv
olves verifying the (N-1)th index of the string, w
here N is the length of the string.
* Extracting each word from the sentence by checki
ng for spaces in between is the crux of the soluti
on. Each word can then be
* manipulated as desired.
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import java.io.*;
class SentenceManipulation{
    public static void main(String[] args)throws IO
Exception{
        BufferedReader br = new BufferedReader(new
InputStreamReader(System.in));
        System.out.println("Enter a sentence termin
ated either by . or ? only");
        String inpSent = br.readLine();
        String opSent = "", temp = "";
        int vwls = 0, cnsnts = 0;
        char lastElem = inpSent.charAt(inpSent.len
gth() - 1); //last element of sentence
        if(lastElem == '.' || lastElem == '?'){

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        for(int i = 0; i < inpSent.length() - 1; ++
i){
            if(inpSent.charAt(i) == ' '){
                opSent = opSent + temp.substring(0
, 1).toUpperCase() + temp.substring(1) + " ";
                temp = "";
            }
            else
                temp = temp + inpSent.charAt(i);
        }
        opSent = opSent + temp.substring(0, 1).toU
pperCase() + temp.substring(1) + lastElem;
        System.out.println("\n"+"***OUTPUT***"+ "\n\
n"+opSent);
        temp = "";
        System.out.println("Word\t\t\tVowels\t\t\tC
onsonants");
        for(int i = 0; i < opSent.length() - 1; ++i
){
            if(opSent.charAt(i) == ' '){
                for(int k = 0; k < temp.length(); +
+k){
                    char ch = temp.charAt(k);
                    if(ch == 'a' || ch == 'A' || c
h == 'e' || ch == 'E' || ch == 'i' || ch == 'I' ||
ch == 'o' || ch == 'O' || ch == 'u' || ch == 'U')
                        vwls++;
                    else
                        cnsnts++;
                }
                System.out.print(temp+"\t\t\t"+vwls
+"\t\t\t"+cnsnts+"\n");
                temp = "";
                vwls = 0;
                cnsnts = 0;
            }
            else
                temp = temp + opSent.charAt(i);
        }
        for(int k = 0; k < temp.length(); ++k){
            char ch = temp.charAt(k);
            if(ch == 'a' || ch == 'A' || c

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h == 'e' || ch == 'E' || ch == 'i' || ch == 'I' ||
ch == 'o' || ch == 'O' || ch == 'u' || ch == 'U')
        vwls++;
        else
            cnsnts++;
    }
    System.out.print(temp+"\t\t\t"+vwls
+" \t\t\t"+cnsnts+"\n");
    }
    else
        System.out.println("Sorry! The sentence you
have entered is invalid.");
    }
}

```