/\* Write a Java program to reverse the string and print it (without using predefined function)

sample

input =String

output = gnirtS

\*/

import java.util.\*;

class Test

{

public static void main(String args[])

{

String src,des="";

Scanner s=new Scanner(System.in);

src=s.nextLine();

int n=src.length();

for(int i=n-1;i>=0;i--)

{

des=des+src.charAt(i);

}

System.out.println(des);

}

}

/\* Write a Java program to find number of words in a sentence

input =

Hello World

output =

2

\*/

import java.util.\*;

class Count\_Words\_Sen

{

String str;

Scanner s;

int count = 1;

Count\_Words\_Sen()

{

s=new Scanner(System.in);

str=s.nextLine();

}

void printWordCount()

{

for (int i = 0; i < str.length() - 1; i++)

{

if ((str.charAt(i) == ' ') && (str.charAt(i + 1) != ' '))

{

count++;

}

}

System.out.println(count);

}

}

class Test

{

public static void main(String args[])

{

Count\_Words\_Sen c=new Count\_Words\_Sen();

c.printWordCount();

}

}

/\*Write a Java program to find sum of numbers in string

sample

input =

kmit123$4#

output =

10

\*/

import java.util.\*;

class Sum\_Num\_Str

{

int sum;

String str;

Scanner s=new Scanner(System.in);

void input()

{

str=s.next();

}

int calculate()

{

sum=0;

for(int i=0;i<str.length();i++)

{

if(str.charAt(i)>48 && str.charAt(i)<58)

//System.out.println(str.charAt(i)-48);

//System.out.println('a');

sum=sum+(str.charAt(i)-48);

}

return sum;

}

}

class Test

{

public static void main(String args[])

{

Sum\_Num\_Str sns=new Sum\_Num\_Str();

sns.input();

int sum= sns.calculate();

System.out.println(sum);

}

}

/\*Write a Java program to count number of spaces in the sentence

sample

input =

count number of spaces in sentence

output =

5

\*/

import java.util.\*;

class Count\_Spaces

{

String str;

int c=0;

Scanner s=new Scanner(System.in);

void count()

{

str=s.nextLine();

/\*for(int i=0;i<str.length();i++)

{

if(str.charAt(i)=='')

c++;

}

System.out.println(c);\*/

String str1[]=str.split("");

System.out.println(str1.length-1);

}

}

class Test

{

public static void main(String args[])

{

Count\_Spaces cs=new Count\_Spaces();

cs.count();

}

}

/\*Write a Java program to count number of words which starts with an vowel and then

print the word along with its length

sample

input =sum of all numbers in a string

output =of 2

all 3

in 2

a 1

Total number of words starting with vowel is 4

\*/

import java.util.\*;

class CVWordsLen

{

String str;

Scanner s=new Scanner(System.in);

int count = 0;

void find()

{

str=s.nextLine();

int j=0;

String str1[]=str.split("");

for(int i=0;i<str1.length;i++)

{

if(str1[i].charAt(j)=='a'||str1[i].charAt(j)=='e'||str1[i].charAt(j)=='i'||str1[i].charAt(j)=='o'||str1[i].charAt(j)=='u')

{

System.out.println(str1[i]+""+str1[i].length());

count++;

}

}

System.out.println("Total number of words starting with vowel is "+ count);

}

}

class Test

{

public static void main(String args[])

{

CVWordsLen c=new CVWordsLen();

c.find();

}

}

/\*Write a Java program to reverse each word in a sentence and print it

sample

input =

123 $abc hi

output =

321 cba$ ih

\*/

import java.util.\*;

class ReverseEachWordSen

{

String str;

Scanner s=new Scanner(System.in);

int count = 0;

void find()

{

str=s.nextLine();

String words[]=str.split("");

String reverseString = "";

for (int i = 0; i < words.length; i++)

{

String word = words[i];

String reverseWord = "";

for (int j = word.length()-1; j >= 0; j--)

{

reverseWord = reverseWord + word.charAt(j);

}

reverseString = reverseString + reverseWord + "";

}

System.out.println(reverseString);

}

}

class Test

{

public static void main(String args[])

{

ReverseEachWordSen r=new ReverseEachWordSen();

r.find();

}

}

/\* Write a java program to sort the strings in lexographical order

sample

input =

4

work hard dream big

output =

big dream hard work

\*/

import java.util.\*;

class LexographicalOrder

{

int n;

String temp,names[];

Scanner s = new Scanner(System.in);

void input()

{

n = s.nextInt();

names = new String[n];

for(int i = 0; i < n; i++)

{

names[i] = s.next();

}

}

void sort()

{

for (int i = 0; i < n; i++)

{

for (int j = i + 1; j < n; j++)

{

if (names[i].compareTo(names[j])>0)

{

temp = names[i];

names[i] = names[j];

names[j] = temp;

}

}

}

}

void print()

{

for (int i = 0; i < n; i++)

{

System.out.print(names[i]+"");

}

}

}

class Test

{

public static void main(String args[])

{

LexographicalOrder l=new LexographicalOrder();

l.input();

l.sort();

l.print();

}

}

/\* Write a Java program to check whether the entered string contains unique characters

sample

1. input =abcd

output =unique

2. input =aabbc

output =not unique

\*/

import java.util.\*;

class Unique

{

String str;

int flag=0;

Scanner s;

Unique()

{

s=new Scanner(System.in);

str=s.nextLine();

}

void check()

{

char a[]=str.toCharArray();

for(int i=0;i<str.length();i++)

{

for(int j=i+1;j<str.length();j++)

{

if(a[i]==a[j])

{

flag=1;

}

}

}

if(flag==0)

{

System.out.println("unique");

}

else

{

System.out.println("not unique");

}

}

}

class Test

{

public static void main(String args[])

{

Unique obj=new Unique();

obj.check();

}

}

/\* Write a Java program to remove all the digits and special characters from the input string and display it

sample

1. input =

&Remo73%v\*e

output =

Remove

2. input =

dis&((Play))Alpha&b\*ets

output =

disPlayAlphabets

\*/

import java.util.\*;

class RemDigSym

{

String src="";

String res="";

Scanner s;

RemDigSym()

{

s=new Scanner(System.in);

src=s.nextLine();

}

void process()

{

for (int i=0;i<src.length();i++)

{

if (src.charAt(i)>=65&&src.charAt(i)<=90 || src.charAt(i)>=97&&src.charAt(i)<=122)

{

res+=src.charAt(i);

}

}

System.out.println(res);

}

}

public class Test

{

public static void main(String[] args)

{

RemDigSym r= new RemDigSym();

r.process();

}

}

/\*Write a Java program to display the maximum occurring character

in a string

sample

input =

console

output =

o

\*/

import java.util.\*;

class MaxOccuranceChar

{

final int ASCII\_SIZE = 256;

char getMaxOccuringChar(String str)

{

int count[] = new int[ASCII\_SIZE];

int len = str.length();

for (int i=0; i<len; i++)

count[str.charAt(i)]++;

int max = -1;

char result = '';

for (int i = 0; i < len; i++)

{

if (count[str.charAt(i)]> max)

{

max = count[str.charAt(i)];

result = str.charAt(i);

}

}

return result;

}

}

class Test

{

public static void main(String[] args)

{

MaxOccuranceChar m=new MaxOccuranceChar();

Scanner s=new Scanner(System.in);

String str = s.next();

System.out.println(m.getMaxOccuringChar(str));

}

}

/\*Write a Java program to swap first and last characters of a word in a sentence and print it

sample

input =

words1 1234 $

output =

1ordsw 4231 $

\*/

import java.util.\*;

class SwapFirstLastCharacters

{

String count(String str)

{

char[] ch = str.toCharArray();

for (int i = 0; i < ch.length; i++)

{

int k = i;

while (i < ch.length && ch[i] != '')

i++;

char temp = ch[k];

ch[k] = ch[i - 1];

ch[i - 1] = temp;

}

return new String(ch);

}

}

class Test

{

public static void main(String[] args)

{

SwapFirstLastCharacters s=new SwapFirstLastCharacters();

Scanner sc=new Scanner(System.in);

String str=sc.nextLine();

System.out.println(s.count(str));

}

}

/\* Write a Java program to check whether the entered string contains unique characters

sample

1. input =abcd

output =unique

2. input =aabbc

output =not unique

\*/

import java.util.\*;

class Unique

{

String str;

int flag=0;

Scanner s;

Unique()

{

s=new Scanner(System.in);

str=s.nextLine();

}

void check()

{

char a[]=str.toCharArray();

for(int i=0;i<str.length();i++)

{

for(int j=i+1;j<str.length();j++)

{

if(a[i]==a[j])

{

flag=1;

}

}

}

if(flag==0)

{

System.out.println("unique");

}

else

{

System.out.println("not unique");

}

}

}

class Test

{

public static void main(String args[])

{

Unique obj=new Unique();

obj.check();

}

}

**/\* Write a Java program to sort a string in alphabetical order**

**sample**

**input =**

**AlphabeticalOrder**

**output =**

**aaabcdeehilloprrt**

**\*/**

import java.util.\*;

class SortString

{

String sortString(String inputString)

{

String in =inputString.toLowerCase();

char tempArray[] = in.toCharArray();

Arrays.sort(tempArray);

return new String(tempArray);

}

}

class Test

{

public static void main(String[] args)

{

Scanner s=new Scanner(System.in);

SortString g=new SortString();

String inputString = s.next();

String outputString = g.sortString(inputString);

System.out.println(outputString);

}

}

/\*Write a java program to find longest word in the sentence

sample

input =

welcome to keshav memorial institute of technology

output =

technology 10

\*/

import java.util.\*;

class LongestWord

{

String str,sarr[],longstr="";

Scanner s=new Scanner(System.in);

int max;

void find()

{

str=s.nextLine();

sarr=str.split("");

max=0;

for(int i=0;i<sarr.length;i++)

{

if(sarr[i].length()>max)

{

max=sarr[i].length();

longstr=sarr[i];

}

}

System.out.println(longstr+""+max);

/\*

logic to sort words in ascending order of length

for(int i=0;i<sarr.length-1;i++)

{

for(int j=i+1;j<sarr.length;j++)

{

if(sarr[i].length()>sarr[j].length())

{

longstr=sarr[i];

sarr[i]=sarr[j];

sarr[j]=longstr;

}

}

}

for(int i=0;i<sarr.length;i++)

{

System.out.print(sarr[i]+"");

}

\*/

}

}

class Test

{

public static void main(String[] args)

{

LongestWord l=new LongestWord();

l.find();

}

}

**/\* Write a java program to find a string from the sentence which has highest vowel count**

**and print the word along with its vowelcount**

**sample**

**input =keshav memorial institute of technology**

**output =memorial 4**

**\*/**

import java.util.\*;

class HighestVowelCountWord

{

String str,sarr[],longstr="";

Scanner s=new Scanner(System.in);

int max;

void find()

{

str=s.nextLine();

sarr=str.split("");

max=0;

int vc;

for(int i=0;i<sarr.length;i++)

{

vc=0;

for(int j=0;j<sarr[i].length();j++)

{

if(sarr[i].charAt(j)=='a'||sarr[i].charAt(j)=='e'||sarr[i].charAt(j)=='i'||sarr[i].charAt(j)=='o'||sarr[i].charAt(j)=='u')

{

vc++;

}

}

if(vc>max)

{

max=vc;

longstr=sarr[i];

}

}

System.out.println(longstr+""+max);

}

}

class Test

{

public static void main(String[] args)

{

HighestVowelCountWord h=new HighestVowelCountWord();

h.find();

}

}

**/\* Write a Java Program to remove vowels from an character array and print it**

**and also print the vowel along with its ascii value.**

**note:**

**if no consonants are present in array after removing vowels,**

**print -1**

**sample**

**input = 5**

**x**

**e**

**r**

**o**

**x**

**output =**

**e 101**

**o 111**

**x r x**

**\*/**

import java.util.\*;

class RemVow

{

char ch[];

int n,count=0;

Scanner s=new Scanner(System.in);;

RemVow()

{

n=s.nextInt();

ch=new char[n];

}

void input()

{

for(int i=0;i<n;i++)

{

ch[i]=s.next().charAt(0);

}

}

void rem()

{

String str="";

for(int i=0;i<n;i++)

{

if(ch[i]=='a'||ch[i]=='e'||ch[i]=='i'||ch[i]=='o'||ch[i]=='u'||ch[i]=='A'||ch[i]=='E'||ch[i]=='I'||ch[i]=='O'||ch[i]=='U')

{

System.out.println(ch[i]+""+(int)ch[i]);

count++;

}

else

{

str=str+ch[i];

}

}

if(count!=n)

{

char ch1[]=str.toCharArray();

for(int i=0;i<ch1.length;i++)

{

System.out.print(ch1[i]+"");

}

}

else

System.out.println("-1");

}

}

class Test

{

public static void main(String[] args)

{

RemVow r=new RemVow();

r.input();

r.rem();

}

}

**/\*Write a Java program to find difference between sum of vowels and consonants in String**

**note:difference should be postive value**

**sample**

**input =**

**vowel**

**output=**

**v 118**

**o 111**

**w 119**

**e 101**

**l 108**

**Sum of Vowels= 212**

**Sum of Consonants= 345**

**133**

**\*/**

import java.util.\*;

class DiffSumVowCon

{

String str;

int vsum=0,csum=0,diff=0;

Scanner s=new Scanner(System.in);

void find()

{

str=s.next();

for(int i=0;i<str.length();i++)

{

if(str.charAt(i)=='a'||str.charAt(i)=='e'||str.charAt(i)=='i'||str.charAt(i)=='o'||str.charAt(i)=='u')

{

System.out.println(str.charAt(i)+""+(int)str.charAt(i));

vsum=vsum+str.charAt(i);

}

else

{

System.out.println(str.charAt(i)+""+(int)str.charAt(i));

csum=csum+str.charAt(i);

}

}

if(vsum>csum)

{

diff=vsum-csum;

}

else

{

diff=csum-vsum;

}

System.out.println("Sum of Vowels= "+vsum);

System.out.println("Sum of Consonants= "+csum);

System.out.println(diff);

}

}

class Test

{

public static void main(String args[])

{

DiffSumVowCon d=new DiffSumVowCon();

d.find();

}

}

**/\***

**Write a java program to remove the duplicate characters from string and display it**

**sample**

**input =**

**characters**

**output =**

**acehrst**

**\*/**

import java.util.\*;

class RemoveDuplicateChar

{

String removeDupsSorted(String str)

{

int r= 1, i = 1;

char arr[] = str.toCharArray();

while (i != arr.length)

{

if(arr[i] != arr[i-1])

{

arr[r] = arr[i];

r++;

}

i++;

}

str = new String(arr);

return str.substring(0,r);

}

String removeDups(String str)

{

char temp[] = str.toCharArray();

Arrays.sort(temp);

str = new String(temp);

return removeDupsSorted(str);

}

/\*

int carr[]=new int[26];

String rstr="";

for(int i=0;i<str.length();i++)

{

char c=str.charAt(i);

carr[c-'a']++;

}

for(int i=0;i<26;i++)

{

if(carr[i]!=0)

{

rstr=rstr+(char)('a'+i);

}

}

return rstr;

\*/

}

class Test

{

public static void main(String[] args)

{

Scanner s=new Scanner(System.in);

RemoveDuplicateChar rm=new RemoveDuplicateChar();

String str=s.next();

System.out.println(rm.removeDups(str));

}

}

**/\*Write a Java program to find the frequency of occurance of each character in**

**the string**

**sample**

**input =**

**kmit**

**output =**

**i 1**

**k 1**

**m 1**

**t 1**

**\*/**

import java.util.\*;

class Count\_Freq\_Char

{

String str;

Scanner s=new Scanner(System.in);

void input()

{

str=s.next();

}

void find()

{

int carr[]=new int[26];

for(int i=0;i<str.length();i++)

{

char c=str.charAt(i);

carr[c-'a']++;

}

for(int i=0;i<26;i++)

{

if(carr[i]!=0)

{

System.out.println((char)(i+'a')+" "+carr[i]);

}

}

}

}

class Test

{

public static void main(String args[])

{

Count\_Freq\_Char c=new Count\_Freq\_Char();

c.input();

c.find();

}

}

**/\*Write a Java program to find and print first non-repeating character in the string**

**sample:**

**1. input =Exception**

**output =First non-repeating character is E**

**2. input =abC#abC#**

**output =All characters in string are repeating**

**3. input =divya**

**output =First non-repeating character is d**

**\*/**

import java.util.\*;

class First\_NonRepeating\_Char

{

int no\_chars = 256;

char carr[] = new char[256];

void getCharCountArray(String str)

{

for (int i = 0; i < str.length(); i++)

carr[str.charAt(i)]++;

}

int firstNonRepeatingChar(String str)

{

int index = -1, i;

for (i = 0; i < str.length(); i++)

{

if (carr[str.charAt(i)] == 1)

{

index = i;

break;

}

}

return index;

}

}

class Test

{

public static void main (String[] args)

{

Scanner s=new Scanner(System.in);

String str = s.next();

First\_NonRepeating\_Char f=new First\_NonRepeating\_Char();

f.getCharCountArray(str);

int index = f.firstNonRepeatingChar(str);

if(index == -1)

{

System.out.println("All characters in string are repeating");

}

else

{

System.out.println("First non-repeating character is " + str.charAt(index));

}

}

}

**/\*Write a Java program to swap two strings without using third variable, then concatenate and print resultant string**

**and also print the substring from the range of indices entered from it**

**sample**

**1.**

**input = Good (//enter str1)**

**Mrng (//enter str2)**

**3 (//enter 1st index to extract substr)**

**6 (//enter 2nd index to extract substr)**

**output=**

**MrngGood (// resultant str)**

**gGo (//resultant substr)**

**2.**

**input = Good**

**Mrng**

**-1**

**3**

**output =**

**MrngGood**

**entered indices are behind/beyond range of size of string**

**3.**

**input = Good**

**Mrng**

**1**

**10**

**output =**

**MrngGood**

**entered indices are behind/beyond range of size of string**

**\*/**

import java.util.\*;

class Swap2Strings

{

Scanner sc = new Scanner(System.in);

String s1,s2,res;

int li,ui;

void input()

{

s1 = sc.next();

s2 = sc.next();

li=sc.nextInt();

ui=sc.nextInt();

}

void swap()

{

s1 = s1 + s2;

s2 = s1.substring(0, s1.length()-s2.length());

s1 = s1.substring(s2.length());

res=s1+s2;

System.out.println(res);

int len=res.length();

if(li>=0 && ui<=len)

{

System.out.println(res.substring(li,ui));

}

else

{

System.out.println("entered indices are behind/beyond range of size of string");

}

}

}

public class Test

{

public static void main(String[] args)

{

Swap2Strings s=new Swap2Strings();

s.input();

s.swap();

}

}