import java.io.File;

import java.io.FileNotFoundException;

import java.util.Scanner;

public class Main {

public static String[] wordTokenize(String filename) {

String data ="" ;

try {

File myFile = new File(filename);

Scanner ReadFile = new Scanner(myFile);

while (ReadFile.hasNextLine()) {

data+=ReadFile.nextLine();

}

}catch(FileNotFoundException f){

f.printStackTrace();

}

String newData = *clean*(data);

int count = *countSpace*(newData);

String[] array = new String[count + 1];

String word = "";

int index = 0;

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

char ch = newData.charAt(i);

if (ch == ' ') {

array[index] = word;

word = "";

index++;

}

else

word += ch;

}

array[index] = word;

return array;

}

private static int countSpace(String newData) {

int count = 0;

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

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

count++;

}

return count;

}

private static String clean(String data) {

String newdata ="";

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

char ch = data.charAt(i);

if ( (ch>='A'&&ch<='Z') || ( ch>='a'&&ch<='z') || ch == ' '){

newdata+= ch;

}

}

return newdata;

}

public static void main(String[] args) {

String[] array = *wordTokenize*("D:\\sahab.txt");

for (String element : array) {

System.*out*.print(element + " ");

}

}

}

//email

import java.io.File;

import java.io.FileNotFoundException;

import java.util.Arrays;

import java.util.Scanner;

public class Email {

public static String readFile(String filePath) {

File file = new File(filePath);

Scanner scanner= null;

try {

scanner = new Scanner(file);

} catch (FileNotFoundException e) {

System.*out*.println("File not found");

System.*exit*(0);

}

String data = "";

while (scanner.hasNextLine()) {

data += scanner.nextLine();

}

return data;

}

public static String[] extractEmail(String filePath) {

String newData = *readFile*(filePath);

int count = *countEmails*(newData);

String[] array = new String[count];

String word = "";

int index = 0;

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

char ch = newData.charAt(i);

if (ch == ' ') {

if (word.contains("@gmail.com")) {

array[index] = word;

index++;

}

word = "";

}

else

word += ch;

}

if (word.contains("@gmail.com"))

array[index] = word;

return array;

}

private static int countEmails(String newData) {

int count = 0;

String word = "";

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

char ch = newData.charAt(i);

if (ch == ' ') {

if (word.contains("@gmail.com"))

count++;

word = "";

}

else word += ch;

}

return count;

}

public static void main(String[] args) {

String[] emails = *extractEmail*("D:\\sahab2.txt");

System.*out*.println(Arrays.*toString*(emails));

}

}

//image cropping

public class ImageCropping {

static void extractBoundaries(int[][] array) {

//Print first row

System.*out*.print("1st Row: ");

for (int i=0; i<array[0].length; i++) {

System.*out*.print(array[0][i] + " ");

}

System.*out*.println();

//Printing 1st column

System.*out*.print("First column: ");

for (int[] ints : array) {

System.*out*.print(ints[0] + " ");

}

System.*out*.println();

//Printing last row

System.*out*.print("Last Row: ");

for (int element : array[array.length - 1]) { // array[array.length - 1] = 2

System.*out*.print(element + " ");

}

System.*out*.println();

//Printing Last column

System.*out*.print("Last columns: ");

for (int[] ints : array) {

System.*out*.print(ints[ints.length - 1] + " ");

}

}

public static void extractCenteralPart(int[][] array) {

System.*out*.print("Central Part: ");

for (int i=1; i < array.length -1; i++) {

for (int j=1; j<array[i].length -1; j++) {

System.*out*.print(array[i][j] + " ");

}

}

}

public static void main(String[] args) {

int[][] array = {

{1, 2, 3, 4, 5, 6},

{5, 3, 5, 3, 6, 3},

{44, 55, 77, 88, 2}

};

int[][] array2 = {

{1, 2},

{3, 4}

};

*extractBoundaries*(array2);

System.*out*.println();

*extractCenteralPart*(array2);

}

}

//Ncon

public class NConsecutiveValues {

static boolean NConRep (int arr[][]) {

boolean ans;

for (int[] ints : arr) {

ans = true;

for (int j = 0; j < ints.length - 1; j++) {

if (ints[j] != ints[j + 1]) {

ans = false;

break;

}

}

if (ans)

return ans;

}

return false;

}

public static void main(String[] args) {

int[][] array = {

{2, 1, 3, 5},

{22, 22, 22, 22},

{12, 42, 88, 53},

{57, 8, 74, 4}

};

System.*out*.println(*NConRep*(array));

}

}