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**ROLL:** 407B001

**ASSIGNMENT NO. 3**

**CODE:**

import java.io.\*;

import java.util.\*;

public class Assignment\_3 {

// Function to display the inverted index

public static void displayIndex(ArrayList<String> invertedData, int[][] docno) {

for (int i = 0; i < invertedData.size(); i++) {

System.out.print(invertedData.get(i) + "\t");

for (int j = 1; j <= docno[i][0]; j++) {

System.out.print(docno[i][j] + "\t");

}

System.out.println();

}

}

// Function to perform indexing

public static void indexing(String fname, ArrayList<String> invertedData, int[][] docno, int fileno) {

try {

BufferedReader br = new BufferedReader(new FileReader(fname));

String line;

while ((line = br.readLine()) != null) {

// Split the line into tokens using whitespace as a delimiter

String[] tokens = line.split("\\s+");

for (String currentToken : tokens) {

int indx = invertedData.indexOf(currentToken);

if (indx == -1) {

invertedData.add(currentToken);

indx = invertedData.indexOf(currentToken);

}

docno[indx][0] = 1;

docno[indx][1] = fileno;

}

}

br.close();

} catch (IOException e) {

e.printStackTrace();

}

}

// Main function

public static void main(String[] args) throws NumberFormatException, IOException {

String fname = "";

ArrayList<String> invertedData = new ArrayList<>();

int[][] docno = new int[100][10];

InputStreamReader ins = new InputStreamReader(System.in);

BufferedReader br = new BufferedReader(ins);

System.out.println("\nENTER TOTAL NO OF FILES:");

int no = Integer.parseInt(br.readLine());

int i = 1;

while (i <= no) {

System.out.println("\nENTER FILE NAME");

fname = br.readLine();

indexing(fname, invertedData, docno, i);

i++;

}

displayIndex(invertedData, docno);

}

}

**OUTPUT:**

(base) venkatesh@Venkateshs-MacBook-Air ISR % /usr/bin/env /Library/Java

/JavaVirtualMachines/jdk-22.jdk/Contents/Home/bin/java -XX:+ShowCodeDetai

lsInExceptionMessages -cp /Users/venkatesh/Library/Application\ Support/C

ode/User/workspaceStorage/3bcee7c40a6f214acedab35476b33222/redhat.java/jd

t\_ws/ISR\_4a074fa7/bin Assignment\_3

ENTER TOTAL NO OF FILES:

1

ENTER FILE NAME

venky.txt

Hey 1

there 1

I'm 1

Venkatesh 1

. 1

These 1

are 1

our 1

ISR 1

practicals. 1

(base) venkatesh@Venkateshs-MacBook-Air ISR %