**ASSIGNMENT A4**

**AIM:** Implementation of pass 2 for macro

Code:

import java.io.BufferedReader;

import java.io.BufferedWriter;

import java.io.File;

import java.io.FileNotFoundException;

import java.io.FileReader;

import java.io.FileWriter;

import java.io.IOException;

import java.util.Scanner;

public class pass2{

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

FileWriter ala=new FileWriter("ala1.txt");

FileWriter mdt=new FileWriter("mdt1.txt");

BufferedWriter bufferedWriter\_mdt=new BufferedWriter(mdt);

BufferedWriter bufferedWriter\_ala=new BufferedWriter(ala);

int ala\_count=1;

String output =new Scanner(new File("pass2.txt")).useDelimiter("\\z").next();

System.out.println(output);

String result1[]=output.split("[,\\s+\\?]");//skipping space and comma and storing into variable

//loop for skipping remaining space if any

int k;

String result;

for(k=0;k<result1.length;k++) {

for(int j=k+1;j<result1.length;j++) {

if(result1[k].equals("")) {

result=result1[k];

result1[k]=result1[j];

result1[j]=result;

}

}

}

for(k=0;k<result1.length;k++) {

System.out.println(result1[k]);

}

String mnt =new Scanner(new File("MNT.txt")).useDelimiter("\\z").next();

System.out.println("="+mnt);

String mntstring[]=mnt.split("[,\\s+\\?]");

String result2;

for(k=0;k<mntstring.length;k++) {

for(int j=k+1;j<mntstring.length;j++) {

if(mntstring[k].equals("")) {

result2=mntstring[k];

mntstring[k]=mntstring[j];

mntstring[j]=result2;

}

}

}

for(k=0;k<mntstring.length;k++) {

System.out.println(">"+mntstring[k]);

}

//--------------------------------------new ALA-----------------------------------------------

BufferedReader reader;

int a[]=new int[10];

int count=0,c=0;

try {

reader = new BufferedReader(new FileReader("pass2.txt"));

String line = reader.readLine();

while (line != null) {

System.out.println(line);

String pass2in[]=line.split("[,\\s+\\?]");

// read next line

for(int j=0;j<mntstring.length;j++)

{

if(pass2in[0].equals(mntstring[j])) {

System.out.println(pass2in[0]+"=="+mntstring[j]);

bufferedWriter\_ala.write("ALA\_TABLE"+String.valueOf(ala\_count));

ala\_count++;

bufferedWriter\_ala.newLine();

for(int i=1;i<pass2in.length;i++)

{

bufferedWriter\_ala.write(String.valueOf(i)+" "+pass2in[i]);

bufferedWriter\_ala.newLine();

}

}

}

line = reader.readLine();

}

bufferedWriter\_ala.close();

reader.close();

} catch (IOException e) {

e.printStackTrace();

}

//------------------------------ALA read---------------------------------------

String alaresult= new Scanner(new File("ala1.txt")).useDelimiter("\\z").next();

String alastring[]=alaresult.split("[,\\s+\\?]");

for(k=0;k<alastring.length;k++) {

for(int j=k+1;j<alastring.length;j++) {

if(alastring[k].equals("")) {

result=alastring[k];

alastring[k]=alastring[j];

alastring[j]=result;

}

}

}

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

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

}

//------------------------------------------mdt-----------------

BufferedReader reader1;

int mend\_flag=1;

int length;

String dummy="";

try {

reader1 = new BufferedReader(new FileReader("MDT.txt"));

String line1 = reader1.readLine();

while (line1 != null) {

//System.out.println(line1);

String mdtin[]=line1.split("[,\\s+\\?]");

if(mdtin[(mdtin.length)-1].equals("MEND"))

{//System.out.println(">>"+mend\_flag);

mend\_flag++;

}

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

{

if(alastring[i].equals("ALA\_TABLE"+String.valueOf(mend\_flag))) {

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

{

if(alastring[j].contains("ALA\_TABLE"))

{

break;

}

else

{

if(mdtin[(mdtin.length)-1].equals(alastring[j]))

{

//System.out.println("==>>"+alastring[j+1]+"=="+mdtin[((mdtin.length)-1)]);

dummy=alastring[j+1];

}

}

}

}

}

mdtin[((mdtin.length)-1)]=dummy;

//-----------------------------MDT WRITE------------------------------------------------

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

{

if(mdtin.length>2)

{

System.out.println(mdtin[i]);

if(i==3)

{

}

else

{

bufferedWriter\_mdt.write(mdtin[i]+" ");

}

}

else

{

}

}

bufferedWriter\_mdt.newLine();

line1 = reader1.readLine();

}//-------------end of while--------------

bufferedWriter\_mdt.close();

reader1.close();

} catch (IOException e) {

e.printStackTrace();

}

//-------------------------------------------------------------------------

}

}

**INPUTS:**

ALA TABLE:

ALA Table 1

1 &ARG1

2 &ARG2

3 &ARG3

ALA Table 2

1 &ARG0

2 &ARG1

ALA Table 3

1 &ARG5

MDT:

1 MOVEM AREG , #1

2 MOVER AREG , #2

3 ADD BREG , #3

4 MEND

5 ADD AREG , #2

6 MEND

7 ADD BREG , #1

8 MEND

MNT:

1 INCR 1

2 ADDS 5

3 SUB 7

**OUTPUT:**

INCR A,B,C

ADDS E,F

SUB D

INCR

A

B

C

ADDS

E

F

SUB

D

=1 INCR 1

2 ADDS 5

3 SUB 7

>1

>INCR

>1

>2

>ADDS

>5

>3

>SUB

>7

>

>

>

INCR A,B,C

INCR==INCR

ADDS E,F

ADDS==ADDS

SUB D

SUB==SUB

0 ALA\_TABLE1

1 1

2 A

3 2

4 B

5 3

6 C

7 ALA\_TABLE2

8 1

9 E

10 2

11 F

12 ALA\_TABLE3

13 1

14 D

1

MOVEM

AREG

#

A

2

MOVER

AREG

#

B

3

ADD

BREG

#

C

5

ADD

AREG

#

F

7

ADD

BREG

#

D