/\*

\* To change this license header, choose License Headers in Project Properties.

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\* and open the template in the editor.

\*/

package kod\_paket;

import java.io.BufferedWriter;

import java.io.File;

import java.io.FileWriter;

import java.io.IOException;

import java.util.ArrayList;

import java.util.List;

import java.util.Random;

import java.util.concurrent.LinkedBlockingQueue;

import java.util.logging.Level;

import java.util.logging.Logger;

/\*\*

\*

\* @author Feyyaz

\*/

public class MyJFrame extends javax.swing.JFrame {

/\*\*

\* Creates new form MyJFrame

\*/

LinkedBlockingQueue<Integer> islem\_kuyruk = new LinkedBlockingQueue<>();

LinkedBlockingQueue<Integer> matris\_2\_kuyruk\_1 = new LinkedBlockingQueue<>();

LinkedBlockingQueue<Integer> matris\_2\_kuyruk\_2 = new LinkedBlockingQueue<>();

List<List<Integer>> sonuc\_listesi = new ArrayList<>();

int kaca\_kac;

List<Integer> matris1 = new ArrayList<>();

List<Integer> matris2 = new ArrayList<>();

long islem\_baslangic = 0;

static long islem\_bitis = 0;

static long yazdir\_basla = 0;

static long yazdir\_bitis = 0;

public MyJFrame() {

initComponents();

}

public void rasgele\_sayi\_dosya(int kaca\_kac\_deger) {

Random rasgele = new Random();

int sayi;

FileWriter yazici1 = null;

BufferedWriter yaz1 = null;

FileWriter yazici2 = null;

BufferedWriter yaz2 = null;

File dosya1 = new File("D://txt\_dosyaları//matris1\_" + kaca\_kac\_deger + ".txt");

if (!dosya1.exists()) {

try {

dosya1.createNewFile();

} catch (IOException ex) {

Logger.getLogger(MyJFrame.class.getName()).log(Level.SEVERE, null, ex);

}

}

File dosya2 = new File("D://txt\_dosyaları//matris2\_" + kaca\_kac\_deger + ".txt");

if (!dosya2.exists()) {

try {

dosya2.createNewFile();

} catch (IOException ex) {

Logger.getLogger(MyJFrame.class.getName()).log(Level.SEVERE, null, ex);

}

}

try {

yazici1 = new FileWriter(dosya1, false);

yaz1 = new BufferedWriter(yazici1);

yazici2 = new FileWriter(dosya2, false);

yaz2 = new BufferedWriter(yazici2);

} catch (IOException ex) {

Logger.getLogger(MyJFrame.class.getName()).log(Level.SEVERE, null, ex);

}

for (int i = 0; i < kaca\_kac\_deger \* kaca\_kac\_deger; i++) {

sayi = 1 + rasgele.nextInt(100);

matris1.add(sayi);

sayi = 1 + rasgele.nextInt(100);

matris2.add(sayi);

}

for (int i = 0; i < kaca\_kac\_deger; i++) {

for (int j = 0; j < kaca\_kac\_deger; j++) {

try {

yaz1.write(matris1.get(i \* kaca\_kac\_deger + j) + "\t");

yaz2.write(matris2.get(i \* kaca\_kac\_deger + j) + "\t");

} catch (IOException ex) {

Logger.getLogger(MyJFrame.class.getName()).log(Level.SEVERE, null, ex);

}

}

try {

yaz1.write("\n");

yaz2.write("\n");

} catch (IOException ex) {

Logger.getLogger(MyJFrame.class.getName()).log(Level.SEVERE, null, ex);

}

}

try {

yaz1.close();

yaz2.close();

} catch (IOException ex) {

Logger.getLogger(MyJFrame.class.getName()).log(Level.SEVERE, null, ex);

}

}

/\*\*

\* This method is called from within the constructor to initialize the form.

\* WARNING: Do NOT modify this code. The content of this method is always

\* regenerated by the Form Editor.

\*/

@SuppressWarnings("unchecked")

// <editor-fold defaultstate="collapsed" desc="Generated Code">

private void initComponents() {

jLabel1 = new javax.swing.JLabel();

jTextField1 = new javax.swing.JTextField();

jLabel2 = new javax.swing.JLabel();

jScrollPane1 = new javax.swing.JScrollPane();

jTextArea1 = new javax.swing.JTextArea();

jButton1 = new javax.swing.JButton();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT\_ON\_CLOSE);

jLabel1.setText("satır sayısını giriniz : ");

jLabel2.setText("süre : ");

jTextArea1.setColumns(20);

jTextArea1.setRows(5);

jScrollPane1.setViewportView(jTextArea1);

jButton1.setText("çarp");

jButton1.addActionListener(new java.awt.event.ActionListener() {

public void actionPerformed(java.awt.event.ActionEvent evt) {

jButton1ActionPerformed(evt);

}

});

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());

getContentPane().setLayout(layout);

layout.setHorizontalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addContainerGap()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addComponent(jButton1, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addGroup(layout.createSequentialGroup()

.addComponent(jLabel2)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT\_SIZE, 245, Short.MAX\_VALUE))

.addGroup(layout.createSequentialGroup()

.addComponent(jLabel1)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addComponent(jTextField1)))

.addContainerGap())

);

layout.setVerticalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addContainerGap()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(jLabel1)

.addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addComponent(jButton1)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addComponent(jLabel2)

.addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addContainerGap(javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE))

);

pack();

}// </editor-fold>

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

kaca\_kac = Integer.parseInt(jTextField1.getText());

for (int i = 0; i < kaca\_kac; i++) {

islem\_kuyruk.add(i);

matris\_2\_kuyruk\_1.add(i);

matris\_2\_kuyruk\_2.add(i);

}

islem\_baslangic = System.nanoTime();

rasgele\_sayi\_dosya(kaca\_kac);

new Thread(new Islem\_1\_Yolla(kaca\_kac, matris\_2\_kuyruk\_1, matris2)).start();

new Thread(new Islem\_2\_Yolla(kaca\_kac, matris\_2\_kuyruk\_2, matris2)).start();

new Thread(new Islem\_1(kaca\_kac, matris\_2\_kuyruk\_1, islem\_kuyruk, matris1, sonuc\_listesi)).start();

new Thread(new Islem\_2(kaca\_kac, matris\_2\_kuyruk\_2, islem\_kuyruk, matris1, sonuc\_listesi)).start();

new Thread(new Sonuc\_Yazdir(kaca\_kac, sonuc\_listesi)).start();

// GEÇEN SÜRE HESAPLAR. \*\*\*\*\*

Thread t = new Thread(new Runnable() {

@Override

public void run() {

while (true) {

if (yazdir\_bitis != 0) {

long fark1 = islem\_bitis - islem\_baslangic;

long fark2 = yazdir\_bitis - yazdir\_basla;

float toplam = ((float) fark1 / (float) 1000000000) + ((float) fark2 / (float) 1000000000);

jTextArea1.setText("geçen süre(sn) : " + toplam);

try {

Thread.sleep(1000000);

} catch (InterruptedException ex) {

Logger.getLogger(MyJFrame.class.getName()).log(Level.SEVERE, null, ex);

}

}

try {

Thread.sleep(2000);

} catch (InterruptedException ex) {

Logger.getLogger(MyJFrame.class.getName()).log(Level.SEVERE, null, ex);

}

}

}

});

t.start();

}

/\*\*

\* @param args the command line arguments

\*/

public static void main(String args[]) {

/\* Set the Nimbus look and feel \*/

//<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">

/\* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.

\* For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html

\*/

try {

for (javax.swing.UIManager.LookAndFeelInfo info : javax.swing.UIManager.getInstalledLookAndFeels()) {

if ("Nimbus".equals(info.getName())) {

javax.swing.UIManager.setLookAndFeel(info.getClassName());

break;

}

}

} catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(MyJFrame.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(MyJFrame.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(MyJFrame.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(MyJFrame.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

}

//</editor-fold>

/\* Create and display the form \*/

java.awt.EventQueue.invokeLater(new Runnable() {

public void run() {

new MyJFrame().setVisible(true);

}

});

}

// Variables declaration - do not modify

private javax.swing.JButton jButton1;

private javax.swing.JLabel jLabel1;

private javax.swing.JLabel jLabel2;

private javax.swing.JScrollPane jScrollPane1;

private javax.swing.JTextArea jTextArea1;

private javax.swing.JTextField jTextField1;

// End of variables declaration

}

/\*

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\* and open the template in the editor.

\*/

package kod\_paket;

import java.util.ArrayList;

import java.util.List;

import java.util.concurrent.LinkedBlockingQueue;

import java.util.logging.Level;

import java.util.logging.Logger;

/\*\*

\*

\* @author Feyyaz

\*/

public class Islem\_1\_Yolla implements Runnable {

LinkedBlockingQueue<Integer> matris\_2\_kuyruk\_1;

List<Integer> matris2;

List<Integer> matris\_2\_satir = new ArrayList<>();

int gelen\_matris\_2\_no;

int satir\_sayisi;

public Islem\_1\_Yolla(int satir\_sayisi, LinkedBlockingQueue<Integer> matris\_2\_kuyruk, List<Integer> matris2) {

this.matris\_2\_kuyruk\_1 = matris\_2\_kuyruk;

this.matris2 = matris2;

this.satir\_sayisi = satir\_sayisi;

}

@Override

public void run() {

matrisBoyutAyarla(satir\_sayisi);

while (true) {

try {

gelen\_matris\_2\_no = matris\_2\_kuyruk\_1.take();

} catch (InterruptedException ex) {

Logger.getLogger(Islem\_1\_Yolla.class.getName()).log(Level.SEVERE, null, ex);

}

matris\_2\_satir.removeAll(matris\_2\_satir);

for (int i = 0; i < satir\_sayisi; i++) {

matris\_2\_satir.add(matris2.get(gelen\_matris\_2\_no \* satir\_sayisi + i));

}

// System.out.println(gelen\_matris\_2\_no+ " ---" + matris\_2\_satir.size());

ikinciMatrisAl(gelen\_matris\_2\_no,matris\_2\_satir);

// System.out.println(gelen\_matris\_2\_no+ " ---" + matris\_2\_satir.size());

}

}

private static void matrisBoyutAyarla(int matrisBoyut) {

pack1.MyWebService1\_Service service = new pack1.MyWebService1\_Service();

pack1.MyWebService1 port = service.getMyWebService1Port();

port.matrisBoyutAyarla(matrisBoyut);

}

private static void ikinciMatrisAl(int satirNo, java.util.List<java.lang.Integer> matris2Satir) {

pack1.MyWebService1\_Service service = new pack1.MyWebService1\_Service();

pack1.MyWebService1 port = service.getMyWebService1Port();

port.ikinciMatrisAl(satirNo, matris2Satir);

}

}

/\*

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\*/

package kod\_paket;

import java.util.ArrayList;

import java.util.List;

import java.util.concurrent.LinkedBlockingQueue;

import java.util.logging.Level;

import java.util.logging.Logger;

/\*\*

\*

\* @author Feyyaz

\*/

public class Islem\_2\_Yolla implements Runnable {

LinkedBlockingQueue<Integer> matris\_2\_kuyruk\_2;

List<Integer> matris2;

List<Integer> matris\_2\_satir = new ArrayList<>();

int gelen\_matris\_2\_no;

int satir\_sayisi;

public Islem\_2\_Yolla(int satir\_sayisi, LinkedBlockingQueue<Integer> matris\_2\_kuyruk, List<Integer> matris2) {

this.matris\_2\_kuyruk\_2 = matris\_2\_kuyruk;

this.matris2 = matris2;

this.satir\_sayisi = satir\_sayisi;

}

@Override

public void run() {

matrisBoyutAyarla(satir\_sayisi);

while (true) {

try {

gelen\_matris\_2\_no = matris\_2\_kuyruk\_2.take();

} catch (InterruptedException ex) {

Logger.getLogger(Islem\_2\_Yolla.class.getName()).log(Level.SEVERE, null, ex);

}

matris\_2\_satir.removeAll(matris\_2\_satir);

for (int i = 0; i < satir\_sayisi; i++) {

matris\_2\_satir.add(matris2.get(gelen\_matris\_2\_no \* satir\_sayisi + i));

}

// System.out.println(gelen\_matris\_2\_no+ " ---" + matris\_2\_satir.size());

ikinciMatrisAl(gelen\_matris\_2\_no,matris\_2\_satir);

// System.out.println(gelen\_matris\_2\_no+ " ---" + matris\_2\_satir.size());

}

}

private static void ikinciMatrisAl(int satirNo, java.util.List<java.lang.Integer> matris2Satir) {

paket1.MyWebService1\_Service service = new paket1.MyWebService1\_Service();

paket1.MyWebService1 port = service.getMyWebService1Port();

port.ikinciMatrisAl(satirNo, matris2Satir);

}

private static void matrisBoyutAyarla(int matrisBoyut) {

paket1.MyWebService1\_Service service = new paket1.MyWebService1\_Service();

paket1.MyWebService1 port = service.getMyWebService1Port();

port.matrisBoyutAyarla(matrisBoyut);

}

}

/\*

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\*/

package kod\_paket;

import java.util.ArrayList;

import java.util.List;

import java.util.concurrent.LinkedBlockingQueue;

import java.util.logging.Level;

import java.util.logging.Logger;

/\*\*

\*

\* @author Feyyaz

\*/

public class Islem\_1 implements Runnable {

List<List<Integer>> sonuc\_listesi;

int satir\_sayisi;

LinkedBlockingQueue<Integer> islem1\_kuyruk;

LinkedBlockingQueue<Integer> matris\_2\_kuyruk\_1;

int gelen\_satir\_no;

List<Integer> matris1\_satir = new ArrayList<>();

List<Integer> matris1 = new ArrayList<>();

public Islem\_1(int satir\_sayisi, LinkedBlockingQueue<Integer> gelen\_matris\_2\_kuy, LinkedBlockingQueue<Integer> gelen\_no, List<Integer> m1, List<List<Integer>> sonuc\_list) {

this.satir\_sayisi = satir\_sayisi;

this.matris\_2\_kuyruk\_1 = gelen\_matris\_2\_kuy;

this.islem1\_kuyruk = gelen\_no;

this.matris1 = m1;

this.sonuc\_listesi = sonuc\_list;

}

@Override

public void run() {

while (true) {

if (matris\_2\_kuyruk\_1.size() == 0) {

try {

gelen\_satir\_no = islem1\_kuyruk.take();

} catch (InterruptedException ex) {

Logger.getLogger(Islem\_1.class.getName()).log(Level.SEVERE, null, ex);

}

matris1\_satir.removeAll(matris1\_satir);

for (int i = 0; i < satir\_sayisi; i++) {

matris1\_satir.add(matris1.get(gelen\_satir\_no \* satir\_sayisi + i));

}

List<Integer> carpim\_sonucu = carpim(gelen\_satir\_no, matris1\_satir);

sonuc\_listesi.add(carpim\_sonucu);

if (sonuc\_listesi.size() == satir\_sayisi) {

MyJFrame.islem\_bitis = System.nanoTime();

}

}

}

}

private static java.util.List<java.lang.Integer> carpim(int satirNo, java.util.List<java.lang.Integer> satir) {

pack1.MyWebService1\_Service service = new pack1.MyWebService1\_Service();

pack1.MyWebService1 port = service.getMyWebService1Port();

return port.carpim(satirNo, satir);

}

}

/\*

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\*/

package kod\_paket;

import java.util.ArrayList;

import java.util.List;

import java.util.concurrent.LinkedBlockingQueue;

import java.util.logging.Level;

import java.util.logging.Logger;

/\*\*

\*

\* @author Feyyaz

\*/

public class Islem\_2 implements Runnable {

List<List<Integer>> sonuc\_listesi;

int satir\_sayisi;

LinkedBlockingQueue<Integer> islem1\_kuyruk;

LinkedBlockingQueue<Integer> matris\_2\_kuyruk\_2;

int gelen\_satir\_no;

List<Integer> matris1\_satir = new ArrayList<>();

List<Integer> matris1 = new ArrayList<>();

public Islem\_2(int satir\_sayisi, LinkedBlockingQueue<Integer> gelen\_matris\_2\_kuy, LinkedBlockingQueue<Integer> gelen\_no, List<Integer> m1, List<List<Integer>> sonuc\_list) {

this.satir\_sayisi = satir\_sayisi;

this.matris\_2\_kuyruk\_2 = gelen\_matris\_2\_kuy;

this.islem1\_kuyruk = gelen\_no;

this.matris1 = m1;

this.sonuc\_listesi = sonuc\_list;

}

@Override

public void run() {

while (true) {

if (matris\_2\_kuyruk\_2.size() == 0) {

try {

gelen\_satir\_no = islem1\_kuyruk.take();

} catch (InterruptedException ex) {

Logger.getLogger(Islem\_2.class.getName()).log(Level.SEVERE, null, ex);

}

matris1\_satir.removeAll(matris1\_satir);

for (int i = 0; i < satir\_sayisi; i++) {

matris1\_satir.add(matris1.get(gelen\_satir\_no \* satir\_sayisi + i));

}

List<Integer> carpim\_sonucu = carpim(gelen\_satir\_no, matris1\_satir);

sonuc\_listesi.add(carpim\_sonucu);

if (sonuc\_listesi.size() == satir\_sayisi) {

MyJFrame.islem\_bitis = System.nanoTime();

}

}

}

}

private static java.util.List<java.lang.Integer> carpim(int satirNo, java.util.List<java.lang.Integer> satir) {

paket1.MyWebService1\_Service service = new paket1.MyWebService1\_Service();

paket1.MyWebService1 port = service.getMyWebService1Port();

return port.carpim(satirNo, satir);

}

}

/\*

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\*/

package kod\_paket;

import java.io.BufferedWriter;

import java.io.File;

import java.io.FileWriter;

import java.io.IOException;

import java.util.List;

import java.util.logging.Level;

import java.util.logging.Logger;

/\*\*

\*

\* @author Feyyaz

\*/

public class Sonuc\_Yazdir implements Runnable {

int satir\_sayisi;

List<List<Integer>> sonuc\_listesi;

File dosya3;

FileWriter yazici3 = null;

BufferedWriter yaz3 = null;

public Sonuc\_Yazdir(int satir\_sayisi, List<List<Integer>> sonuc\_listesi) {

this.satir\_sayisi = satir\_sayisi;

this.sonuc\_listesi = sonuc\_listesi;

}

@Override

public void run() {

while (true) {

if (sonuc\_listesi.size() == satir\_sayisi) {

MyJFrame.yazdir\_basla = System.nanoTime();

dosya3 = new File("D://txt\_dosyaları//matris\_sonuc\_" + satir\_sayisi + ".txt");

if (!dosya3.exists()) {

try {

dosya3.createNewFile();

} catch (IOException ex) {

Logger.getLogger(Sonuc\_Yazdir.class.getName()).log(Level.SEVERE, null, ex);

}

}

try {

yazici3 = new FileWriter(dosya3, false);

yaz3 = new BufferedWriter(yazici3);

} catch (IOException ex) {

Logger.getLogger(Sonuc\_Yazdir.class.getName()).log(Level.SEVERE, null, ex);

}

for (int i = 0; i < satir\_sayisi; i++) {

for (int j = 0; j < satir\_sayisi; j++) {

if (sonuc\_listesi.get(j).get(0) == i) {

for (int k = 0; k < satir\_sayisi; k++) {

try {

yaz3.write(sonuc\_listesi.get(j).get(k + 1) + "\t");

} catch (IOException ex) {

Logger.getLogger(Sonuc\_Yazdir.class.getName()).log(Level.SEVERE, null, ex);

}

}

try {

yaz3.write("\n");

} catch (IOException ex) {

Logger.getLogger(Sonuc\_Yazdir.class.getName()).log(Level.SEVERE, null, ex);

}

}

}

}

try {

yaz3.close();

} catch (IOException ex) {

Logger.getLogger(Sonuc\_Yazdir.class.getName()).log(Level.SEVERE, null, ex);

}

MyJFrame.yazdir\_bitis = System.nanoTime();

try {

Thread.sleep(1000000);

} catch (InterruptedException ex) {

Logger.getLogger(Sonuc\_Yazdir.class.getName()).log(Level.SEVERE, null, ex);

}

}

try {

Thread.sleep(1000);

} catch (InterruptedException ex) {

Logger.getLogger(Sonuc\_Yazdir.class.getName()).log(Level.SEVERE, null, ex);

}

}

}

}