RMI:

1. *Interfave:*

public interface ThuatToan extends Remote{

public String getMessageServer() throws RemoteException;

public void sendMessageServer(String message)throws RemoteException;

}

1. *IMPL:*

public class ThuatToanImpl extends UnicastRemoteObject implements ThuatToan{

Stack cinet;

Stack server;

public ThuatToanImpl()throws RemoteException

{

this.cinet = new Stack();

this.server = new Stack();

}

@Override

public synchronized String getMessageServer() throws RemoteException {

String message ="";

if(server.isEmpty())

{

try {

wait();

} catch (InterruptedException ex) {

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

}

}

message = (String) server.pop();

return message;

}

@Override

public void sendMessageServer(String message) throws RemoteException {

cinet.push(message);

}

public synchronized String getMessageClinet(){

String message = "";

if(!cinet.isEmpty())

{

message += cinet.pop();

}

return message;

}

public synchronized void sendMessageClinet(String message)

{

server.push(message);

notify();

}

}

1. *Thuật toán:*

public String giaiThuat(String a){

int b = Integer.parseInt(a) ;

int c =1;

for (int i = 1; i <= b; i++) {

c = c\*i;

}

String d = String.valueOf(c);

return d;

}

public String hamMu(String a , String b)

{

int c = Integer.parseInt(a) ;

int d = Integer.parseInt(b) ;

int e = (int) Math.pow(c, d);

String f = String.valueOf(e);

return f;

}

public boolean soNguyenTo(String a)

{

int b = Integer.parseInt(a);

int dem = 0;

if(b == 1 || b ==0 )

{

return false;

}

for (int i = 1; i <= b; i++) {

if(b%i==0)

{

dem ++;

}

}

if(dem==2)

{

return true;

}else

return false;

}

--- diem chuoi

public Map token(String text)

{

Map<String,Integer> hashMap=new HashMap<String,Integer>();

String[] words=text.split("[ .!?]");

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

if (words[i].length()>1){

if(hashMap.get(words[i])!=null){

int value=hashMap.get(words[i]).intValue();

value++;

hashMap.put(words[i],value);

}

else

hashMap.put(words[i],1);

}

}

Map<String,Integer> treeMap=new TreeMap<String,Integer>(hashMap);

System.out.print(treeMap);

return treeMap;

}

public String soHoanHoa(String a)

{

int tong = 0 ;

int b = Integer.parseInt(a);

for (int i = 1; i <= b/2; i++) {

if(b%i==0)

{

tong= tong +i;

}

}

if(tong==b){

return "la so hoan hoa " + a ;

}else{

return "la so khong hoan hoa " + a;

}

}

public String soHoanHoa1(String a)

{

int tong = 0 ;

int b = Integer.parseInt(a);

for (int i = 1; i <= b/2; i++) {

if(b%i==0)

{

tong= tong +i;

}

}

if(tong!=b){

return "";

}else{

return tong+"";

}

}

1. *SerVer*

Khai Báo:

Registry reg;

ThuatToanImpl thuatToanImpl;

Sử dụng:

this.setTitle("server ");

setLocationRelativeTo(null);

thuatToanImpl = new ThuatToanImpl();

reg = LocateRegistry.createRegistry(1234);

reg.bind("thuatToanImpl",thuatToanImpl );

thuatToanImpl.sendMessageClinet(" server raeady ... ");

Nút Button:

String send =jTextField1.getText().trim();

thuatToanImpl.sendMessageClinet(send);

jTextArea1.append("\nServer Say :" + send);

Main:

Server a = new Server();

a.setVisible(true);

Thread b = new Thread(a);

b.start();

Run:

while (true) {

String a = thuatToanImpl.getMessageClinet();

if(!a.equals("")){

int n = 1;

if(a.indexOf("^") > 0)

{

String [] text = a.split("\\^");

jTextArea1.append("\n clinet say : " + thuatToanImpl.hamMu(text[0].trim(),text[1].trim()));

thuatToanImpl.sendMessageClinet(( text[0].trim() + " mũ "+text[1].trim() +" kết quả là"

+thuatToanImpl.hamMu(text[0].trim(),text[1].trim())));

n= 0;

}else if(a.indexOf("!") > 0)

{

String[] text = a.split("\\!");

jTextArea1.append("\n clinet say : "+ thuatToanImpl.giaiThuat(text[0].trim()));

thuatToanImpl.sendMessageClinet(" giai thua cua " + a +" là :" +thuatToanImpl.giaiThuat(text[0].trim()));

n= 0;

}

else if (a.indexOf(".") > 0) {

String [] text = a.split("\\.");

if(thuatToanImpl.soNguyenTo(text[0].trim())){

jTextArea1.append("clinet say " + text[0].trim() + " là số nguyên tố");

thuatToanImpl.sendMessageClinet( "số :" + text[0].trim() + " là số nguyên tố " );

}

else{

jTextArea1.append("\n clinet say " + text[0].trim() + " Không phải là số nguyên tố");

thuatToanImpl.sendMessageClinet(" số : "+a + "là :"+ text[0].trim() + "Không phải là số nguyên tố " );

}

n= 0;

}

else{

jTextArea1.append("\n Clinet say : " + thuatToanImpl.token(a) );

thuatToanImpl.sendMessageClinet("diem chuoi " + thuatToanImpl.token(a));

n= 0;

}

if(n==1)

{

jTextArea1.append("\nloi kieu du lieu");

}

}

}

}

/// run so hoan hoa

String a = kiemTraImpl.sendToClinet();

if(!a.isEmpty()){

jTextArea1.append("\n clinet gui : " + kiemTraImpl.soHoanHoa(a));

kiemTraImpl.sendMessageToClinet( "\n server gui : " + kiemTraImpl.soHoanHoa(a));

for (int i = 1; i <= 100; i++) {

String b =kiemTraImpl.soHoanHoa1(i+"");

if(!b.equals("")){

kiemTraImpl.sendMessageToClinet( "\n"+ b );

}

}

}

1. *Clinet :*

Khai Báo:

Registry reg;

ThuatToan thuatToan;

Sử dụng:

this.setTitle("clinet");

reg = LocateRegistry.getRegistry("127.0.0.1", 1234);

thuatToan = (ThuatToan)reg.lookup("thuatToanImpl");

// thuatToan.sendMessageServer(" clinet radeay ...");

jTextArea1.append("\n server " + thuatToan.getMessageServer());

jTextArea1.append("\n Quy ước tính : \n thêm vào đuôi dấu \".\" là tính số nguyen tố \n ");

button:

String send = jTextField1.getText().trim();

thuatToan.sendMessageServer(send);

jTextArea1.append("\n clinet say " + send);

run:

whiler(true){

String a = thuatToan.getMessageServer();

if(!a.equals("")){

jTextArea1.append("\n Server Say :" + a);

}}