**Sender and Receiver program using Frame**

**Sender**

import java.awt.\*;

import java.awt.event.\*;

import java.io.\*;

import java.net.\*;

class Sender extends Frame

{

Label l1,l2,l3;

Button b1,b2;

TextField t1,t2;

List li1;

ServerSocket ss;

Socket s;

BufferedReader br;

PrintStream ps;

Sender()throws Exception

{

setVisible(true);

setSize(500,500);

addWindowListener(new WindowAdapter()

{

public void windowClosing(WindowEvent we)

{

System.exit(0);

}

});

l1 = new Label("Name");

l2 = new Label("Message");

l3 = new Label("History");

b1 = new Button("Send");

b2 = new Button("Receive");

t1 = new TextField(50);

t2 = new TextField(50);

li1 = new List();

add(l1);add(t1);

add(l2);add(t2);

add(l3);add(li1);

add(b1);add(b2);

setLayout(null);

l1.setBounds(50,50,100,20);t1.setBounds(50,70,300,30);

l2.setBounds(50,130,100,20);t2.setBounds(50,150,300,30);

l3.setBounds(50,200,300,20);li1.setBounds(50,220,300,250);

b1.setBounds(370,220,60,20);b2.setBounds(370,250,60,20);

try{

ss = new ServerSocket(2023);

s = ss.accept();

br = new BufferedReader(new InputStreamReader(s.getInputStream()));

ps = new PrintStream(s.getOutputStream());} catch(Exception e){}

b1.addActionListener(ae ->

{

String s1 = t2.getText();

ps.println(t1.getText() +":"+ s1);

li1.add("Me: "+s1);

t2.setText("");

t2.requestFocus();

});

b2.addActionListener(ae->{

try{

li1.add(br.readLine());

}catch(Exception e){}

});

}

public static void main(String ...arg) throws Exception

{

new Sender();

}

}

**Receiver**

import java.awt.\*;

import java.awt.event.\*;

import java.io.\*;

import java.net.\*;

class Receiver extends Frame

{

Label l1,l2,l3;

Button b1,b2;

TextField t1,t2;

List li1;

Socket s;

BufferedReader br;

PrintStream ps;

Receiver()throws Exception

{

setVisible(true);

setSize(500,500);

addWindowListener(new WindowAdapter()

{

public void windowClosing(WindowEvent we)

{

System.exit(0);

}

});

l1 = new Label("Name");

l2 = new Label("Message");

l3 = new Label("History");

b1 = new Button("Send");

b2 = new Button("Receive");

t1 = new TextField(50);

t2 = new TextField(50);

li1 = new List(50);

add(l1);add(t1);

add(l2);add(t2);

add(l3);add(li1);

add(b1);add(b2);

setLayout(null);

l1.setBounds(50,50,100,20);t1.setBounds(50,70,300,30);

l2.setBounds(50,130,100,20);t2.setBounds(50,150,300,30);

l3.setBounds(50,200,300,20);li1.setBounds(50,220,300,250);

b1.setBounds(370,220,60,20);b2.setBounds(370,250,60,20);

s = new Socket(InetAddress.getByName("localhost"),2023);

br = new BufferedReader(new InputStreamReader(s.getInputStream()));

ps = new PrintStream(s.getOutputStream());

b1.addActionListener(ae ->

{

String s1 =t2.getText();

ps.println(t1.getText() +":"+ s1);

li1.add( "Me: "+ s1);

t2.setText("");

t2.requestFocus();

});

b2.addActionListener(ae -> {

try{

li1.add(br.readLine());}catch(Exception e){}

});

}

public static void main(String ...arg)throws Exception

{

new Receiver();

}

}

**Output**

