10.Develop a MultiThreaded Echo Server using Swings and use appropriate Listener.

```
import java.io.*;
import java.net.*;
import javax.swing.*;

public class EchoServer extends JFrame {
 private JTextArea textArea;

 public EchoServer() {
  super("Echo Server");
  textArea = new JTextArea();
  add(new JScrollPane(textArea));
  setSize(400, 300);
  setVisible(true);
 }

 public void startServer() {
  try {
   // Create a server socket
   ServerSocket serverSocket = new ServerSocket(8000);
   textArea.append("Server started at " + new java.util.Date() + '\n');

   // Create a socket for each connection and start a new thread
   while (true) {
    Socket socket = serverSocket.accept();
    textArea.append("New client accepted at " + new java.util.Date() + '\n');

    ClientThread thread = new ClientThread(socket);
    thread.start();
   }
  }
  catch(IOException ex) {
    ex.printStackTrace();
  }
}

public static void main(String[] args) {
  EchoServer server = new EchoServer();
  server.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
  server.startServer();
}

// Inner class for the client thread
class ClientThread extends Thread {
  private Socket socket;
  private DataInputStream inputFromClient;
  private DataOutputStream outputToClient;

  public ClientThread(Socket socket) {
    this.socket = socket;
    try {
      // Create data input and output streams
      inputFromClient = new DataInputStream(
        socket.getInputStream());
      outputToClient = new DataOutputStream(
        socket.getOutputStream());
    }
    catch(IOException ex) {
      ex.printStackTrace();
    }
  }
```

```
    public void run() {
      try {
        while (true) {
          // Receive message from the client
          String message = inputFromClient.readUTF();

          // Send the message back to the client
          outputToClient.writeUTF(message);

          // Display to the text area
          textArea.append(message + '\n');
        }
      }
      catch(IOException ex) {
        ex.printStackTrace();
      }
    }
  }
}
```