

TCP/IP sockets, Client - Server program to make the client send the file name and to make the server send back the contents of the requested file if present.

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

public class ContentsClient
{
    public static void main( String args[ ] ) throws Exception
    {
        Socket sock = new Socket("127.0.0.1", 4000);

        // reading the file name from keyboard. Uses input stream
        System.out.print("Enter the file name");
        BufferedReader keyRead = new BufferedReader(new InputStreamReader(System.in));
        String fname = keyRead.readLine();

        // sending the file name to server. Uses PrintWriter
        OutputStream ostream = sock.getOutputStream( );
        PrintWriter pwrite = new PrintWriter(ostream, true);
        pwrite.println(fname);

        // receiving the contents from server. Uses input stream
        InputStream istream = sock.getInputStream();
        BufferedReader socketRead = new BufferedReader(new InputStreamReader(istream));

        String str;
        while((str = socketRead.readLine()) != null) // reading line-by-line
        {
            System.out.println(str);
        }
        pwrite.close();
        socketRead.close();
        keyRead.close();
    }
}
```

TCP/IP sockets, Client - Server program to make the client send the file name and to make the server send back the contents of the requested file if present.

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

public class ContentsServer
{
    public static void main(String args[]) throws Exception
    {
        // establishing the connection with the server
        ServerSocket sersock = new ServerSocket(4000);
        System.out.println("Server ready for connection");
        Socket sock = sersock.accept(); // binding with port: 4000
        System.out.println("Connection is successful and waiting for client request");

        // reading the file name from client
        InputStream istream = sock.getInputStream( );
        BufferedReader fileRead =new BufferedReader(new InputStreamReader(istream));
        String fname = fileRead.readLine( );

        // reading file contents
        BufferedReader contentRead = new BufferedReader(new FileReader(fname) );

        // keeping output stream ready to send the contents
        OutputStream ostream = sock.getOutputStream( );
        PrintWriter pwrite = new PrintWriter(ostream, true);

        String str;
        while((str = contentRead.readLine()) != null) // reading line-by-line from file
        {
            pwrite.println(str); // sending each line to client
        }
        sock.close(); sersock.close(); // closing network sockets
        pwrite.close(); fileRead.close(); contentRead.close();
    }
}
```