

Program – 14:

Aim: Using TCP/IP sockets, write a client-server program to make client sending the file name and the server to send back the contents of the requested file if present.

Program:

CLIENTSIDE:

```
package pgm7;
import java.net.*;
import java.io.*;
```

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

        System.out.println("Enter the filename:");
        BufferedReader keyRead = new BufferedReader(new InputStreamReader(System.in));

        String fname = keyRead.readLine();

        OutputStream ostream = sock.getOutputStream();
        PrintWriter pwrite = new PrintWriter(ostream, true);

        // Send file name to server
        pwrite.println(fname);

        InputStream istream = sock.getInputStream();
        BufferedReader socketRead = new BufferedReader(new InputStreamReader(istream));

        String str;
        while ((str = socketRead.readLine()) != null) {
            System.out.println(str);
        }

        pwrite.close();
        socketRead.close();
        keyRead.close();
        sock.close();
    }
}

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

public class TCPS {
    public static void main(String[] args) throws Exception {
        ServerSocket sersock = new ServerSocket(4000);
        System.out.println("Server ready for connection...");

        Socket sock = sersock.accept();
```

```
System.out.println("Connection successful. Waiting for filename...");

InputStream istream = sock.getInputStream();
BufferedReader fileRead = new BufferedReader(new InputStreamReader(istream));

String fname = fileRead.readLine(); // Read filename from client
BufferedReader contentRead = new BufferedReader(new FileReader(fname));

OutputStream ostream = sock.getOutputStream();
PrintWriter pwrite = new PrintWriter(ostream, true);

String str;
while ((str = contentRead.readLine()) != null) {
    pwrite.println(str);
}

sock.close();
sersock.close();
pwrite.close();
fileRead.close();
contentRead.close();
}
}
```

Output:

SERVER OUTPUT:

```
Server ready for connection...
Connection successful. Waiting for filename...
```

CLIENT OUTPUT:

```
----- CLIENT SIDE -----
Enter the filename
test.txt

Hello World
This is a TCP Socket File Transfer Program
End of File
--
```