

## PRACTICAL-1

**AIM: CREATE A CHAT APPLICATION USING TCP OR UDP PROTOCOL.**

**PROGRAM:**

- SERVER:

```
import java.io.*;
import java.net.*;
class myserver{
    public static void main(String args[]) throws Exception
    {
        // Create server Socket
        ServerSocket ss = new ServerSocket(5553);
        // connect it to client socket
        Socket s = ss.accept();
        System.out.println("Connection established");
        // to send data to the client
        DataOutputStream dos = new DataOutputStream(s.getOutputStream());
        // to read data coming from the client
        BufferedReader br = new BufferedReader(new InputStreamReader(s.getInputStream()));

        // to read data from the keyboard
        BufferedReader kb = new BufferedReader( new InputStreamReader(System.in));

        // server executes continuously
        while (true) {
            String str, str1;

            // repeat as long as the client
            // does not send a null string
            // read from client
            while ((str = br.readLine()) != null) {
                System.out.println(str);
                str1 = kb.readLine();
                // send to client
                dos.writeBytes(str1 + "\n");
            }
            // close connection
            dos.close();
            br.close();
            kb.close();
            ss.close();
            s.close();
            // terminate application
        }
    }
}
```

```
System.exit(0); } } }
```

- CLIENT:

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

class myclient {

    public static void main(String args[]) throws Exception {

        // Create client socket

        Socket s = new Socket("localhost", 5553);

        // to send data to the server

        DataOutputStream dos = new DataOutputStream( s.getOutputStream());

        // to read data coming from the server

        BufferedReader br=newBufferedReader(newInputStreamReader(s.getInputStream()));

        // to read data from the keyboard

        BufferedReader kb = new BufferedReader( new InputStreamReader(System.in));

        String str, str1;

        // repeat as long as exit

        // is not typed at client

        while (!(str = kb.readLine()).equals("exit")) {

            // send to the server

            dos.writeBytes(str + "\n");

            // receive from the server

            str1 = br.readLine();

            System.out.println(str1);

        }

        // close connection.

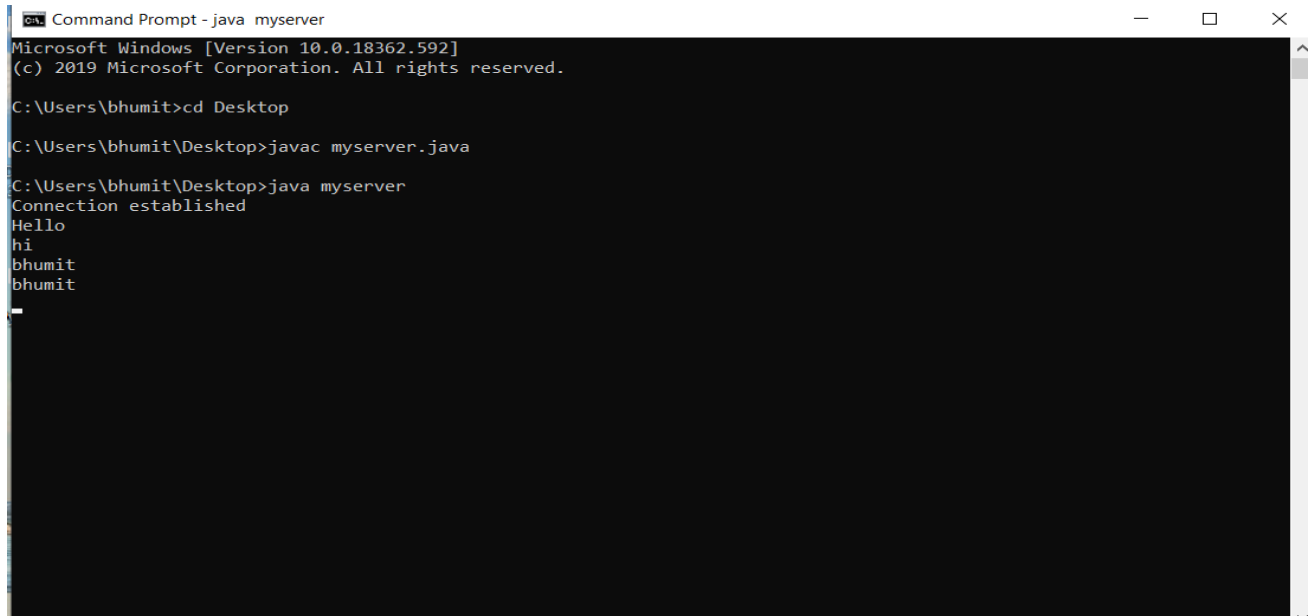
        dos.close();

        br.close();

        kb.close();

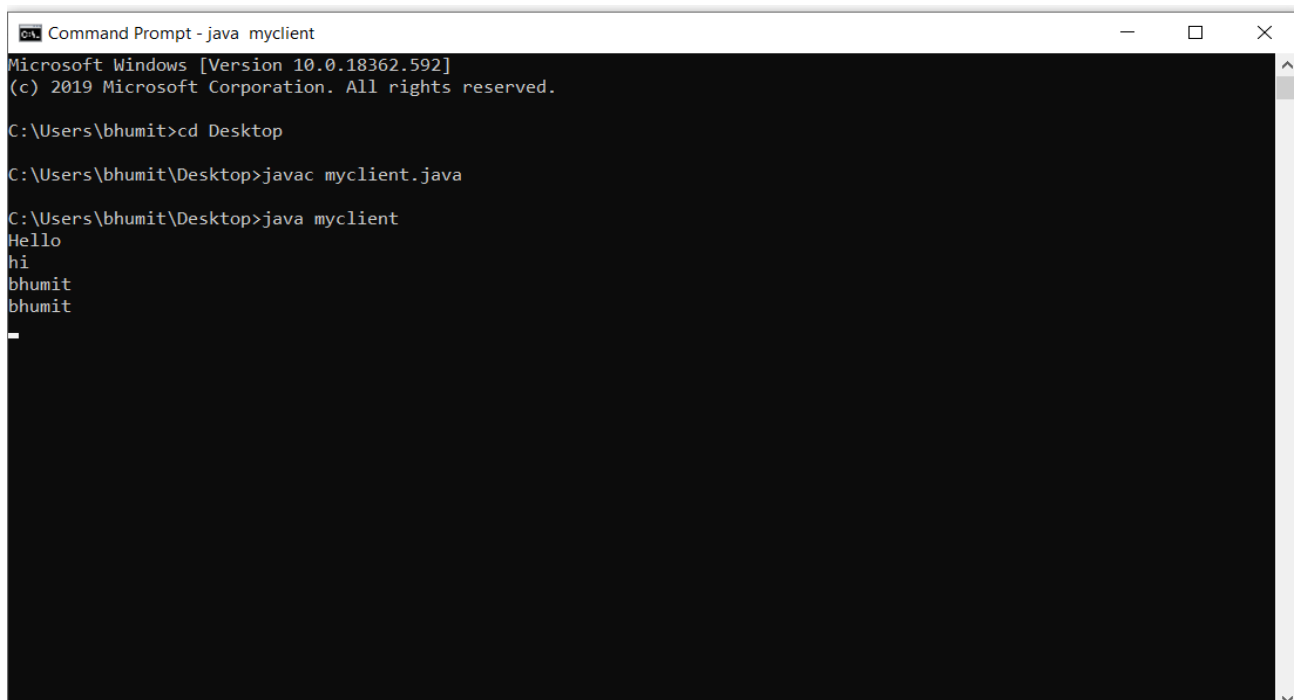
        s.close();} }
```

## OUTPUT:



```
Command Prompt - java myserver
Microsoft Windows [Version 10.0.18362.592]
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C:\Users\bhumit>cd Desktop
C:\Users\bhumit\Desktop>javac myserver.java
C:\Users\bhumit\Desktop>java myserver
Connection established
Hello
hi
bhumit
bhumit
_
```



```
Command Prompt - java myclient
Microsoft Windows [Version 10.0.18362.592]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\bhumit>cd Desktop
C:\Users\bhumit\Desktop>javac myclient.java
C:\Users\bhumit\Desktop>java myclient
Hello
hi
bhumit
bhumit
_
```