

# CSE3011 NETWORK PROGRAMMING

## LAB EXPERIMENT 11

NAME – B PRATYUSH

REGISTRATION NUMBER – 19BCN7114

FACULTY – PROF. MUNEESWARI

Experiment Description: Reading and writing from HTTP Server

### Reading from Server

#### HttpServer.java

```
package Lab11;
import java.net.*;
import java.io.*;
public class HttpServer{
    public static void main (String[] args) {
        for (int i = 0; i < args.length; i++)
        {
            try
            {
                URL u = new URL(args[i]);
                HttpURLConnection uc = (HttpURLConnection)
u.openConnection( );
                int code = uc.getResponseCode( );
                String response = uc.getResponseMessage( );
                System.out.println("HTTP/1.x " + code + " " +
response);
                for (int j = 1; ; j++)
                {
                    String header = uc.getHeaderField(j);
                    String key = uc.getHeaderFieldKey(j);
                    if (header == null || key == null)
                    {
                        break;
                    }
                }
            }
        }
    }
}
```

```

        System.out.println(uc.getHeaderFieldKey(j) + ":"
" + header);
    }
    InputStream in = new
BufferedInputStream(uc.getInputStream( ));
    Reader r = new InputStreamReader(in);
    int c;
    while ((c = r.read( )) != -1)
    {
        System.out.print((char) c);
    }
    System.out.println();
}
catch (MalformedURLException ex)
{
    System.err.println(args[0] + " is not a
parseable URL");
}
catch (IOException ex)
{
    System.err.println(ex);
}
}
}
}

```



```
eclipse-workspace - Network Programming/src/Lab11/HttpServer.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help

<terminated> HttpServer [Java Application] C:\Users\LENOVO\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_16.0.2.v20210721-1149\jre\bin\javaw.exe (12-Nov-2021, 11:16:12 pm - 11:16:14 pm)

<script type="text/javascript">
$(document).ready(function () {

    var textp;

    $('.txtplaceholder').bind("focusin", function () {

        textp = $(this).attr('rel');

        if ($(this).val() == textp) {
            $(this).val("");
        }

    });
    $('.txtplaceholder').bind("focusout", function () {

        if ($(this).val() == "") {
            $(this).val(textp);
        }

    });

});

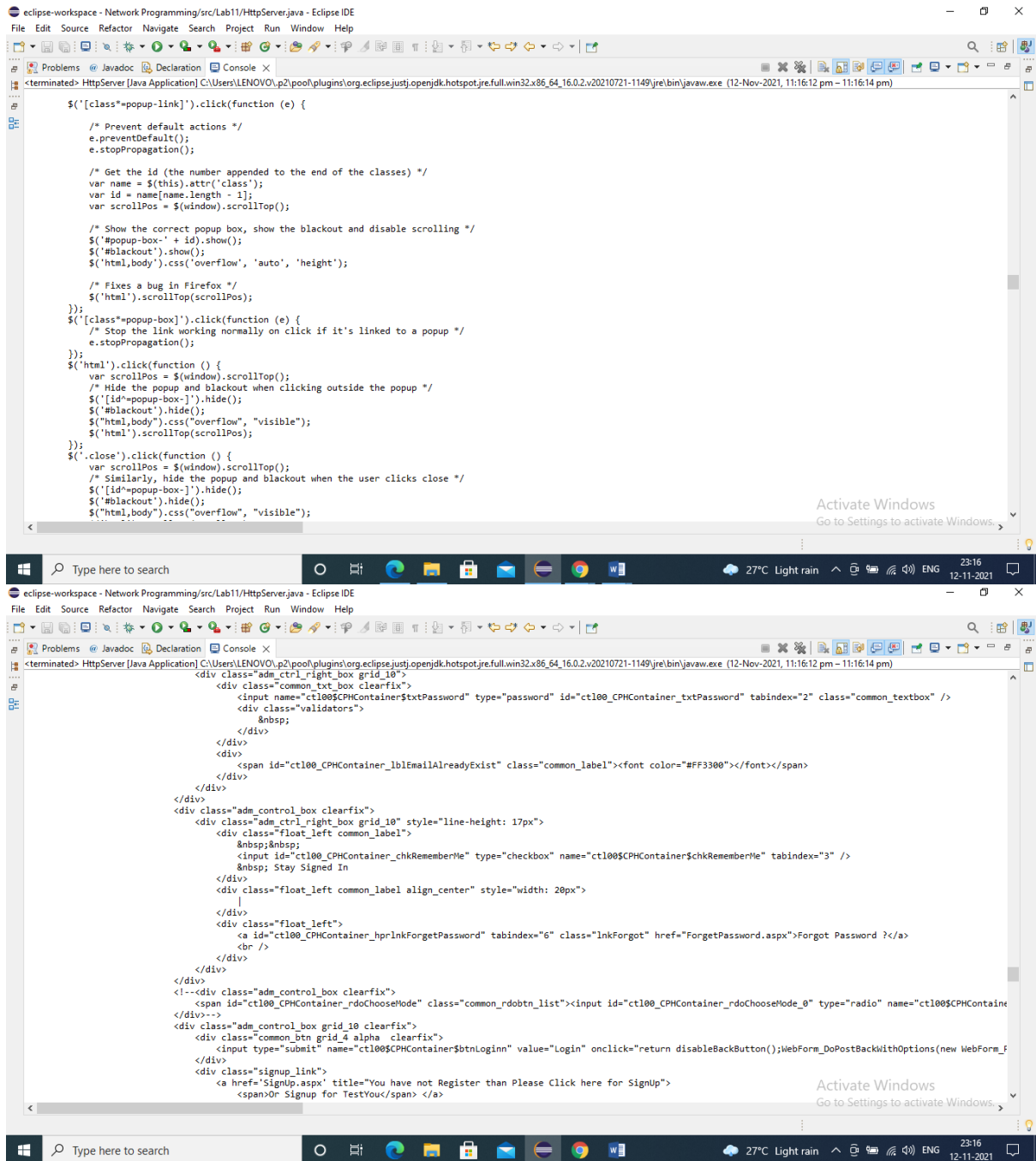
</script>
<script type="text/javascript">
//jQuery for tooltip 2
$(document).ready(function () {
//Tooltips
var data;
var tip;
$(".tooltip a").hover(function () {
```

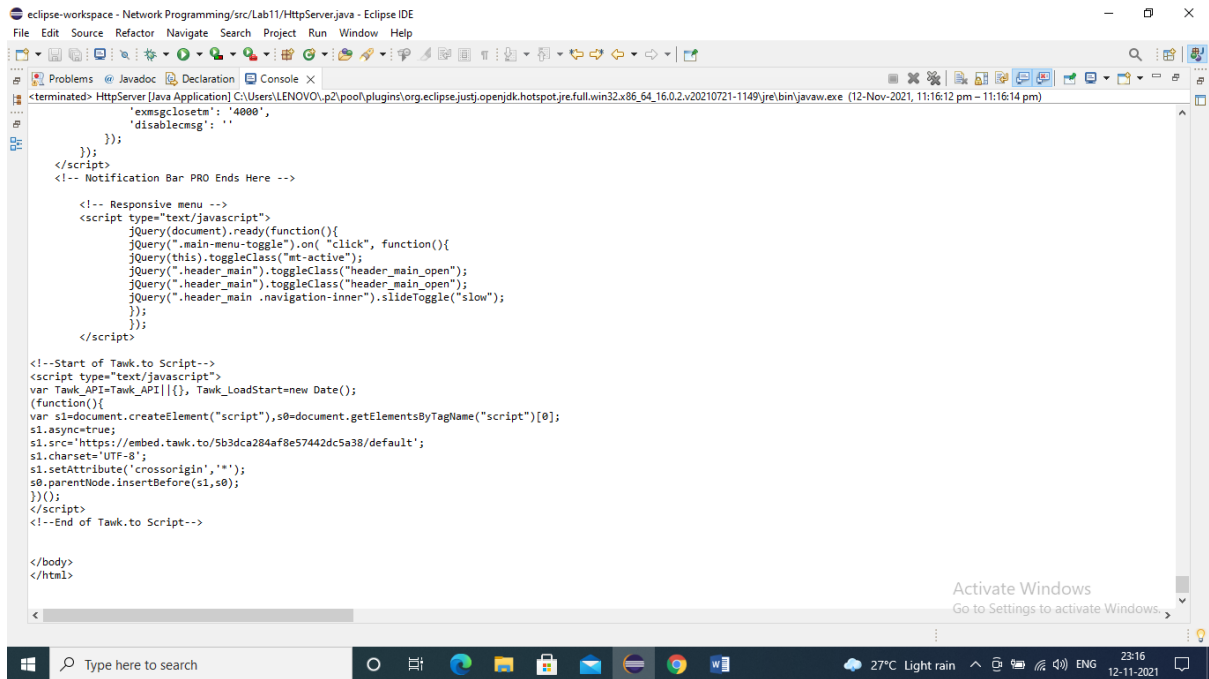
```
Type here to search
27°C Light rain
ENG 23:16 12-11-2021

eclipse-workspace - Network Programming/src/Lab11/HttpServer.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help

<terminated> HttpServer [Java Application] C:\Users\LENOVO\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_16.0.2.v20210721-1149\jre\bin\javaw.exe (12-Nov-2021, 11:16:12 pm - 11:16:14 pm)

float: left;
margin: 2px -3px 0px 2px;
}
.common_btn .normal_btn
{
    line-height: 0;
}
.output_label
{
    padding: 0px;
    margin-bottom: 20px;
}
</style>
<script type="text/javascript" language="javascript">
function disableBackButton() {
    window.history.forward();
    return true;
}
</script>
<link rel="canonical" href="http://www.testyou.in/Login.aspx" /></head>
<body>
<!-- Google Tag Manager -->
<noscript>
<iframe src="//www.googletagmanager.com/ns.html?id=GTM-PK7R2G" height="0" width="0"
style="display: none; visibility: hidden"></iframe>
</noscript>
<script type="text/javascript">
(function (w, d, s, l, i) {
w[l] = w[l] || []; w[l].push({ 'gtm.start':
new Date().getTime(), event: 'gtm.js'
}); var f = d.getElementsByTagName(s)[0],
j = d.createElement(s), dl = l != 'dataLayer' ? '&l=' + l : ''; j.async = true; j.src =
'//www.googletagmanager.com/gtm.js?id=' + i + dl; f.parentNode.insertBefore(j, f);
})(window, document, 'script', 'dataLayer', 'GTM-PK7R2G');</script>
<!-- End Google Tag Manager -->
```





## Writing to Server

### HttpWrite.java

```
package Lab11;
```

```
import java.io.IOException;
import java.io.OutputStream;
import java.net.InetSocketAddress;
import java.util.*;
```

```
import com.sun.net.httpserver.HttpExchange;
import com.sun.net.httpserver.HttpHandler;
import com.sun.net.httpserver.HttpServer;
```

```
public class HttpWrite {
    static Scanner sin=new Scanner(System.in);
    public static void main(String[] args) throws
Exception {
        HttpServer server = HttpServer.create(new
InetSocketAddress(8098), 0);
        server.createContext("/httpwrite", new
MyHandler());
        server.setExecutor(null);
        server.start();
    }
}
```

```

    }

    static class MyHandler implements HttpHandler {
        public void handle(HttpExchange t) throws
IOException {
            System.out.println("Enter data to send to
server!");
            String response = sin.nextLine();
            t.sendResponseHeaders(200, response.length());
            OutputStream os = t.getResponseBody();
            os.write(response.getBytes());
            os.close();
        }
    }
}

```

## Output

The screenshot shows the Eclipse IDE interface. The console window is open, displaying the following output:

```

Enter data to send to server!
Hello! This is Pratyush with the Registration number 198CN7114

```

The IDE title bar indicates the project is 'eclipse-workspace - Network Programming/src/Lab11/HttpWrite.java - Eclipse IDE'. The console window title is 'HttpWrite [Java Application] C:\Users\LENOVO\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full\win32.x86\_64\_16.0.2.v20210721-1149\jre\bin\javaw.exe (12-Nov-2021, 11:06:22 pm)'. The Windows taskbar at the bottom shows the date and time as 23:13 on 12-11-2021.



Activate Windows  
Go to Settings to activate Windows.

