

```
package io.snyk.programming.tls;

import javax.net.ssl.SSLSocket;
import javax.net.ssl.SSLSocketFactory;
import java.io.*;

public class JavaTLSClientExample {

    private static final String[] protocols = new String[]{"TLSv1.3"};
    private static final String[] cipher_suites = new String[]{"TLS_AES_128_GCM_SHA256"};

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

        SSLSocket socket = null;
        PrintWriter out = null;
        BufferedReader in = null;
        try {
            // Step : 1
            SSLSocketFactory factory = (SSLSocketFactory) SSLSocketFactory.getDefault();

            // Step : 2
            socket = (SSLSocket) factory.createSocket("google.com", 443);

            // Step : 3
            socket.setEnabledProtocols(protocols);
            socket.setEnabledCipherSuites(cipher_suites);

            // Step : 4 {optional}
            socket.startHandshake();
```

```

// Step : 5

out = new PrintWriter(
    new BufferedWriter(
        new OutputStreamWriter(
            socket.getOutputStream())));

out.println("GET / HTTP/1.0");
out.println();
out.flush();

if (out.checkError()) {
    System.out.println("SSLSocketClient: java.io.PrintWriter error");
}

// Step : 6

in = new BufferedReader(
    new InputStreamReader(
        socket.getInputStream()));

String inputLine;
while ((inputLine = in.readLine()) != null) {
    System.out.println(inputLine);
}

} catch (Exception e) {
    e.printStackTrace();
} finally {
    if (socket != null) {

```

```
        socket.close();
    }
    if (out != null) {
        out.close();
    }
    if (in != null) {
        in.close();
    }
}
}
```

```
import javax.net.ssl.SSLSocket;
import javax.net.ssl.SSLServerSocket;
import javax.net.ssl.SSLServerSocketFactory;
import java.io.*;
```

```
public class JavaTLSServerExample {
```

```
    private static final String[] protocols = new String[]{"TLSv1.3"};
```

```
    private static final String[] cipher_suites = new String[]{"TLS_AES_128_GCM_SHA256"};
```

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

```
        SSLServerSocket serverSocket = null;
```

```
        try {
```

```

// Step : 1
SSLServerSocketFactory factory =
    (SSLServerSocketFactory) SSLServerSocketFactory.getDefault();

// Step : 2
serverSocket = (SSLServerSocket) factory.createServerSocket(8980);

// Step : 3
serverSocket.setEnabledProtocols(protocols);
serverSocket.setEnabledCipherSuites(cipher_suites);

// Step : 4
SSLSocket sslSocket = (SSLSocket) serverSocket.accept();

// Step : 5
InputStream inputStream = sslSocket.getInputStream();
InputStreamReader inputStreamReader = new
    InputStreamReader(inputStream);

BufferedReader bufferedReader = new BufferedReader(inputStreamReader);
String request = null;
while((request = bufferedReader.readLine()) != null) {
    System.out.println(request);
    System.out.flush();
}
} catch (Exception e) {
    e.printStackTrace();
} finally {
    if (serverSocket != null) {

```

```
        serverSocket.close();  
    }  
}  
}
```