Practical – 10

GitHub Link: https://github.com/Devsharma511/NodeJs.git

1. Goal: Set up an **mTLS** server that:

Requires client certificates

Supports certificate reload without restart

2. Tasks: Create **mtls-server.js** that watches cert files and updates TLS context.

Project Structure:

mtls-server.js:

mtls-server.js U

Practical-10 > mtls-server.js > ...

```
31  const server = https.createServer(options, (req, res) => {
38    res.writeHead(200, { 'Content-Type': 'text/plain' });
39    res.end('mTLS connection established');
40    console.log('Authorized client connected');
41  });
42
43  server.listen(8443, () => {
44    console.log('mTLS server listening on port 8443');
45  });
46
47  server.on('error', (err) => {
48    console.error('Server error:', err);
49  });
50
51  [certPath, keyPath, caPath].forEach((filePath) => {
52    fs.watchFile(filePath, () => reloadCert());
53  });
54
55  function reloadCert() {
56    try {
57      console.log('Reloading TLS certificates...');
58      options = loadOptions();
59      const secureContext = https.createSecureContext(options);
60      server.setSecureContext(secureContext);
61      console.log('TLS certificates reloaded successfully');
62    } catch (err) {
63      console.error('Failed to reload certificates:', err);
64    }
65  }
```

Output:

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS

```
PS C:\Users\sharm\nodejs> cd Practical-10
PS C:\Users\sharm\nodejs\Practical-10> node mtls-server
Loading certificates...
Server cert size: 1108
Key size: 1732
CA cert size: 1130
mTLS server listening on port 8443
Authorized client connected
Authorized client connected
Authorized client connected
```