Ex. No: 6	**Web Server Creation using NodeJS**
2.10.2023	

Aim:

To create a Web Server offering basic web service(s) to the front-end.

Program:

Server.js

```javascript
const http = require('http');
const fs = require('fs');
const path = require('path');

const server = http.createServer((req, res) => {

  console.log(`[${new Date().toISOString()}] ${req.method} ${req.url}`);

  const publicPath = path.join(__dirname, 'public');
  const filePath = path.join(publicPath, req.url === '/' ? 'index.html' : req.url.slice(1));

  fs.readFile(filePath, (err, data) => {
    if (err) {
      res.writeHead(404, {'Content-Type': 'text/plain'});
      res.end('404 Not Found');
    } else {
      const ext = path.extname(filePath).toLowerCase();
      const contentType = {
        '.html': 'text/html',
        '.css': 'text/css',
        '.js': 'text/javascript',
        '.jpg': 'image/jpeg',
        '.png': 'image/png',
        '.gif': 'image/gif',
      }[ext] || 'application/octet-stream';

      res.writeHead(200, {'Content-Type': contentType});

      res.end(data);
    }
```

```
  });
});


const port = process.env.PORT || 3000;


server.listen(port, () => {
  console.log(`Server running at http://localhost:${port}/`);
});
```

Index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Home</title>
  <link rel="stylesheet" href="style.css">
</head>
<body>
  <h1>Welcome to the Home Page</h1>
  <p>This is the home page of our website.</p>
  <img src="example.jpg" alt="Example Image">
  <script src="script.js"></script>
</body>
</html>
```
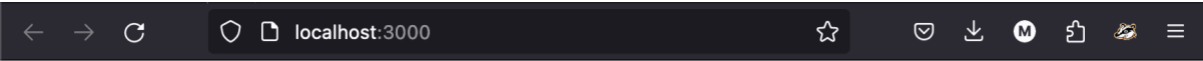
About.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>About</title>
  <link rel="stylesheet" href="style.css">
</head>
```

```html
<body>
  <h1>About Us</h1>
  <p>This is the about page of our website.</p>
  <img src="example.jpg" alt="Example Image">
  <script src="script.js"></script>
</body>
</html>
```

Output:

```html
<body>
  <h1>About Us</h1>
  <p>This is the about page of our website.</p>
  <img src="example.jpg" alt="Example Image">
  <script src="script.js"></script>
```

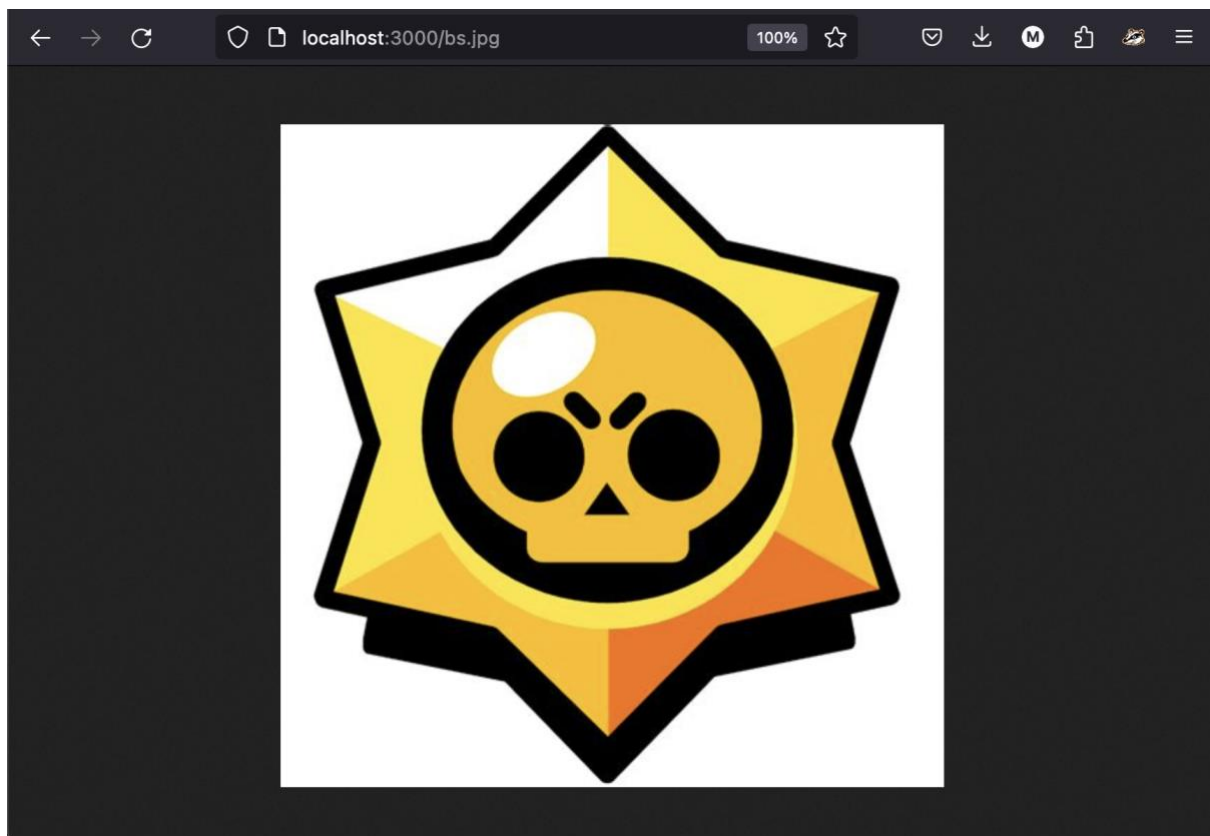# Welcome to the Home Page

This is the home page of our website.

Example Image

About Us

This is the about page of our website.

Example Image

Result:
Successfully created a Web Server offering basic web service(s) to the front-end.