Assignment 3(a)

a. Create a Node.JS Application which serves a static website.

CODE:

Index.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  <title>Interactive Webpage</title>
  <style>
    * {
      box-sizing: border-box;
    }
    body {
      margin: 0;
      font-family: Arial, sans-serif;
      background-color: #f4f4f4;
      color: #333;
    }
    nav {
      background-color: #333;
      padding: 15px;
      text-align: center;
    }
    nav a {
      color: white;
      text-decoration: none;
      margin: 0 15px;
      font-size: 18px;
    }
    nav a:hover {
      text-decoration: underline;
    }
    .hero {
      background-image: url('https://via.placeholder.com/1500x500');
      background-size: cover;
      background-position: center;
      color: rgb(153, 221, 238);
      text-align: center;
```

```
    padding: 100px 20px;
    transition: opacity 0.5s ease;
  }
  .hero h1 {
    font-size: 3.5rem;
    margin-bottom: 20px;
  }
  .hero p {
    font-size: 1.5rem;
    margin-bottom: 40px;
  }
  .button {
    background-color: #ff6347;
    color: white;
    padding: 15px 30px;
    font-size: 1.2rem;
    border: none;
    border-radius: 5px;
    cursor: pointer;
    transition: background-color 0.3s, transform 0.3s;
  }
  .button:hover {
    background-color: #ff4500;
    transform: translateY(-2px);
  }
  footer {
    background-color: #333;
    color: white;
    text-align: center;
    padding: 20px 0;
    font-size: 14px;
  }
  @media (max-width: 768px) {
    .hero h1 {
      font-size: 2.5rem;
    }
    .hero p {
      font-size: 1.2rem;
    }
  }
 </style>
</head>
<body>
```

```html
<nav>
  <a href="#">Home</a>
  <a href="#">About</a>
  <a href="#">Services</a>
  <a href="#">Contact</a>
</nav>
<div class="hero" id="hero">
  <h1>Welcome to Our Website!</h1>
  <p>We offer top-quality services for your needs.</p>
  <button class="button" onclick="changeContent()">Click Me!</button>
</div>
<footer>
  <p>&copy; 2025 Your Company. All rights reserved.</p>
</footer>

<script>
  const heroSection = document.getElementById('hero');

  function changeContent() {
    heroSection.style.opacity = 0;
    setTimeout(() => {
      heroSection.innerHTML = `
        <h1>Thank you for clicking!</h1>
        <p>We hope you enjoy exploring our website.</p>
        <button class="button" onclick="goBack()">Go Back</button>
      `;
      heroSection.style.opacity = 1;
    }, 500);
  }
  function goBack() {
    heroSection.style.opacity = 0;
    setTimeout(() => {
      heroSection.innerHTML = `
        <h1>Welcome to Our Website!</h1>
        <p>We offer top-quality services for your needs.</p>
        <button class="button" onclick="changeContent()">Click Me!</button>
      `;
      heroSection.style.opacity = 1;
    }, 500);
  }
</script>

</body>
</html>
```
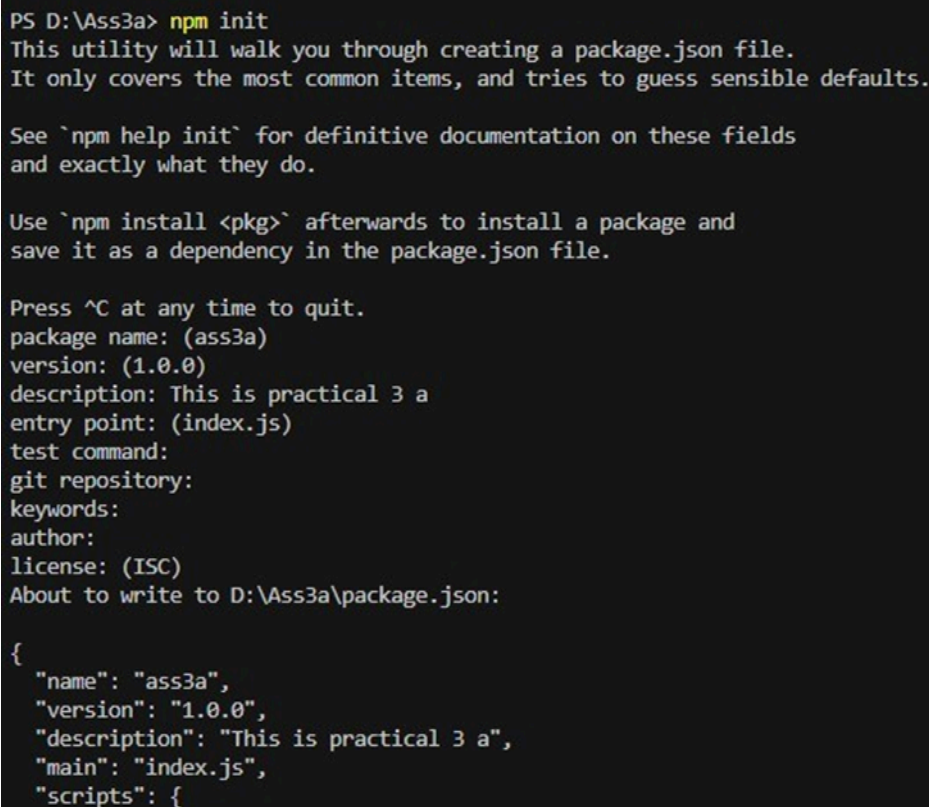
Index.js
```
const express = require('express');
const app = express();
const port = 4000;

app.use(express.static('public'));

app.listen(port, () => {
  console.log(`Server is running on port ${port}`);
});
```

OUTPUT:

```
PS D:\Ass3a> npm init
This utility will walk you through creating a package.json file.
It only covers the most common items, and tries to guess sensible defaults.

See `npm help init` for definitive documentation on these fields
and exactly what they do.

Use `npm install <pkg>` afterwards to install a package and
save it as a dependency in the package.json file.

Press ^C at any time to quit.
package name: (ass3a)
version: (1.0.0)
description: This is practical 3 a
entry point: (index.js)
test command:
git repository:
keywords:
author:
license: (ISC)
About to write to D:\Ass3a\package.json:

{
  "name": "ass3a",
  "version": "1.0.0",
  "description": "This is practical 3 a",
  "main": "index.js",
  "scripts": {
```

```
  "scripts": {
  "scripts": {
  "scripts": {
  "scripts": {
  "scripts": {
  "scripts": {
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "author": "",
  "license": "ISC"
}


Is this OK? (yes) yes
npm notice
npm notice New major version of npm available! 9.6.7 -> 11.2.0
npm notice Changelog: https://github.com/npm/cli/releases/tag/v11.2.0
npm notice Run npm install -g npm@11.2.0 to update!
npm notice
PS D:\Ass3a> npm install express

added 69 packages, and audited 70 packages in 1s

14 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
PS D:\Ass3a> node index.js
Server is running on port 4000
▯
```

← → C ① localhost:4000   ☆ ⊚ ⋮

Home   About   Services   Contact

Welcome to Our Website!

We offer top-quality services for your needs.

Click Me!