

Roll No: 222A3064

Name: Aabhas

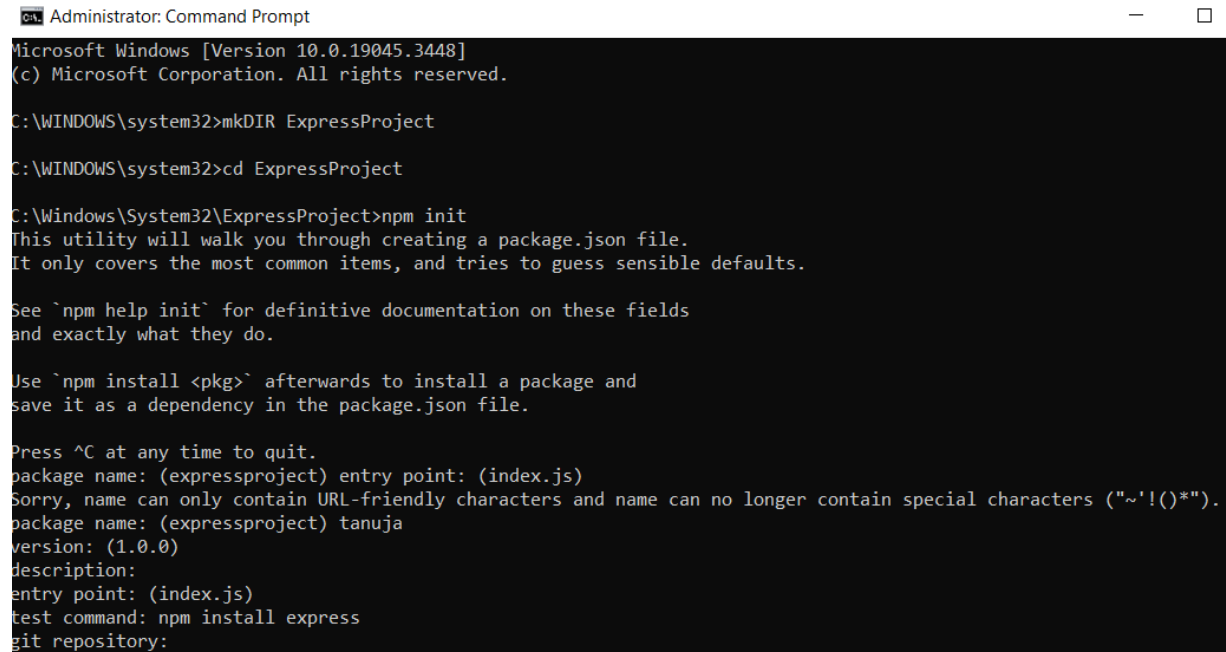
Janbandhu

Experiment No. 12

Aim: Install Express

THEORY: Express JS: Express is a fast, assertive, essential and moderate web framework of Node.js. You can assume express as a layer built on the top of the Node.js that helps manage a server and routes. It provides a robust set of features to develop web and mobile applications. Some core features of Express framework: It can be used to design single-page, multi-page and hybrid web applications. It allows to setup middle wares to respond to HTTP Requests. It defines a routing table which is used to perform different actions based on HTTP method and URL. It allows to dynamically render HTML Pages based on passing arguments to templates. Installation process of Express JS: Open a new terminal in VS Code In the command line type the following command: `npm install express` Hence express JS framework is installed in your respected systems

INSTALLATION OF EXPRESS:



Administrator: Command Prompt

Microsoft Windows [Version 10.0.19045.3448]
(c) Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>mkDIR ExpressProject

C:\WINDOWS\system32>cd ExpressProject

C:\Windows\System32\ExpressProject>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: (expressproject) entry point: (index.js)

Sorry, name can only contain URL-friendly characters and name can no longer contain special characters ("~'!()*").

package name: (expressproject) tanuja

version: (1.0.0)

description:

entry point: (index.js)

test command: npm install express

git repository:

Administrator: Command Prompt

```
test command: npm install express
git repository:
keywords:
author:
license: (ISC)
About to write to C:\Windows\System32\ExpressProject\package.json:
```

```
{
  "name": "tanuja",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "npm install express"
  },
  "author": "",
  "license": "ISC"
}
```

Is this OK? (yes) yes

```
C:\Windows\System32\ExpressProject>npm install express
```

```
added 58 packages, and audited 59 packages in 6s
```

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

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

```
found 0 vulnerabilities
```

```
C:\Windows\System32\ExpressProject>node get_example1.js
```

```
node:internal/modules/cjs/loader:1080
  throw err;
  ^
```

```
Error: Cannot find module 'C:\Windows\System32\ExpressProject\get_example1.js'
    at Module._resolveFilename (node:internal/modules/cjs/loader:1077:15)
    at Module._load (node:internal/modules/cjs/loader:922:27)
    at Function.executeUserEntryPoint [as runMain] (node:internal/modules/run_main:81:12)
    at node:internal/main/run_main_module:23:47 {
  code: 'MODULE_NOT_FOUND',
  requireStack: []
}
```

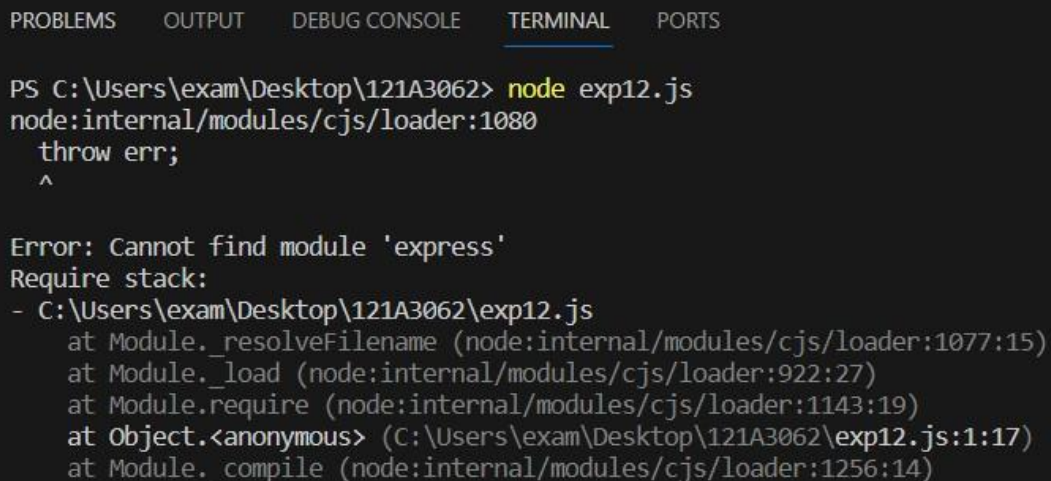
```
Node.js v18.17.1
```

CODE:

```
const express = require('express');
const app = express();
const port = 3000; // Set the port for the server

// Define a route to handle the root URL
app.get('/', (req, res) => {
  res.send('Hello, World!');
});

// Start the server and listen on the specified port
app.listen(port, () => {
  console.log(`Server is running at http://localhost:${port}`);
});
```

OUTPUT:A screenshot of a code editor's terminal window. The terminal has tabs for 'PROBLEMS', 'OUTPUT', 'DEBUG CONSOLE', 'TERMINAL' (which is selected), and 'PORTS'. The terminal text shows a command prompt 'PS C:\Users\exam\Desktop\121A3062>' followed by the command 'node exp12.js'. Below this, it shows the error message 'node:internal/modules/cjs/loader:1080 throw err;' with a caret pointing to the first line of the error stack. The error message is 'Error: Cannot find module 'express'' and the 'Require stack:' lists the file 'C:\Users\exam\Desktop\121A3062\exp12.js' and the internal Node.js modules involved in the process.

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

PS C:\Users\exam\Desktop\121A3062> node exp12.js
node:internal/modules/cjs/loader:1080
  throw err;
  ^

Error: Cannot find module 'express'
Require stack:
- C:\Users\exam\Desktop\121A3062\exp12.js
  at Module._resolveFilename (node:internal/modules/cjs/loader:1077:15)
  at Module._load (node:internal/modules/cjs/loader:922:27)
  at Module.require (node:internal/modules/cjs/loader:1143:19)
  at Object.<anonymous> (C:\Users\exam\Desktop\121A3062\exp12.js:1:17)
  at Module._compile (node:internal/modules/cjs/loader:1256:14)
```

```
  requireStack: [ 'C:\\Users\\exam\\Desktop\\121A3062\\exp12.js' ]  
}
```

```
Node.js v18.17.1
```

```
PS C:\Users\exam\Desktop\121A3062> npm i express
```

```
added 58 packages in 2s
```

```
8 packages are looking for funding
```

```
  run `npm fund` for details
```

```
PS C:\Users\exam\Desktop\121A3062> node exp12.js
```

```
Server is running at http://localhost:3000
```

```
□
```

Hello, World!

Conclusion: Hence we have successfully installed express.