Lesson 05 Demo 01

Working with IIFEs, Callbacks, and Closures

Objective: To implement IIFEs, callbacks, and closures

Tools required: Visual Studio Code
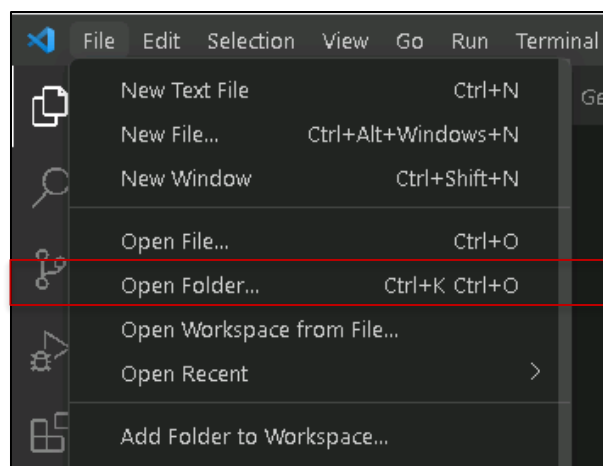
Prerequisites: NA

Steps to be followed:

1. Writing a JavaScript program of IIFEs, callbacks, and closures
2. Executing and verifying the working of IIFEs with callbacks and closures

Step 1: Implementing a JavaScript program of IIFEs, callbacks, and closures:

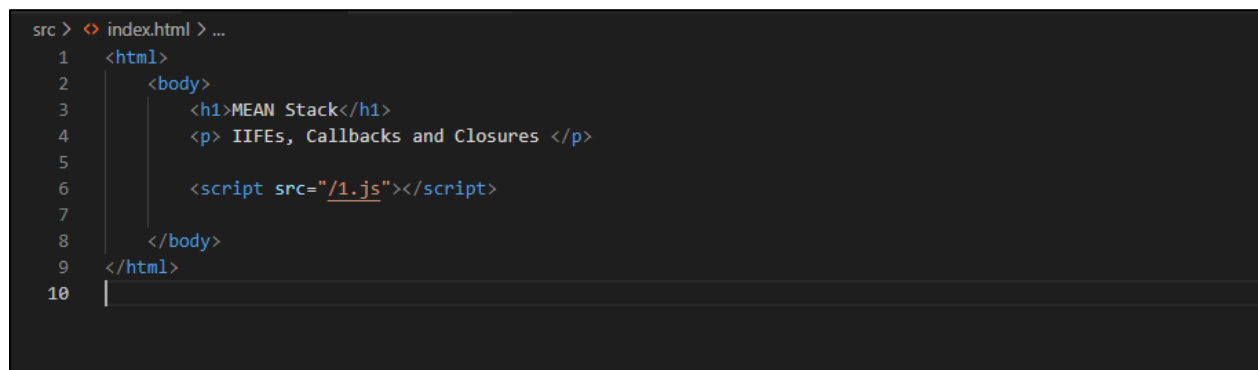**Note:** Create a folder named **src** folder for the project.

1.1 Open Visual Studio Code and Right click on the **File** menu of the code editor and select *Open Folder* option*:*

1.2 Right click on the **src** folder of the project and select *New File* option and enter the filename as **index.html**

1.3 Write the code shown below in the **index.html**:

<html>
   <body>
      <h1>MEAN Stack</h1>
      <p> IIFEs, Callbacks and Closures </p>
      <script src="IIFEs_Callbacks_Closures.js"></script>
   </body>
</html>

```
src > <> index.html > ...
  1    <html>
  2        <body>
  3            <h1>MEAN Stack</h1>
  4            <p> IIFEs, Callbacks and Closures </p>
  5
  6            <script src="/1.js"></script>
  7
  8        </body>
  9    </html>
 10    |
```

1.4 Right click on the **src** folder of the project, select *New File* option and enter the filename as **IIFEs_Callbacks_Closures.js** and write the code shown below:

```
const empId = (function() {
   let count = 0;
   return function() {
     ++count;
     return `emp${count}`;
   };
})();

console.log("New Employee IDs are listed here");
console.log("Alex: "+empId());
console.log("Dexter: "+empId());
console.log("Annie: "+empId());
```

```
//Callbacks
console.log("\n"); //to start the output from the neext line
function fullName(firstName, lastName, callback){
  console.log("My name is " + firstName + " " + lastName);
  callback(lastName);
}

var greeting = function(ln){
  console.log('Welcome ' + ln);
};

fullName("Alex", "Wilson", greeting);
console.log("\n");
fullName("Dexter", "Johnson", greeting);
console.log("\n");
fullName("Annie", "Butler", greeting);
```
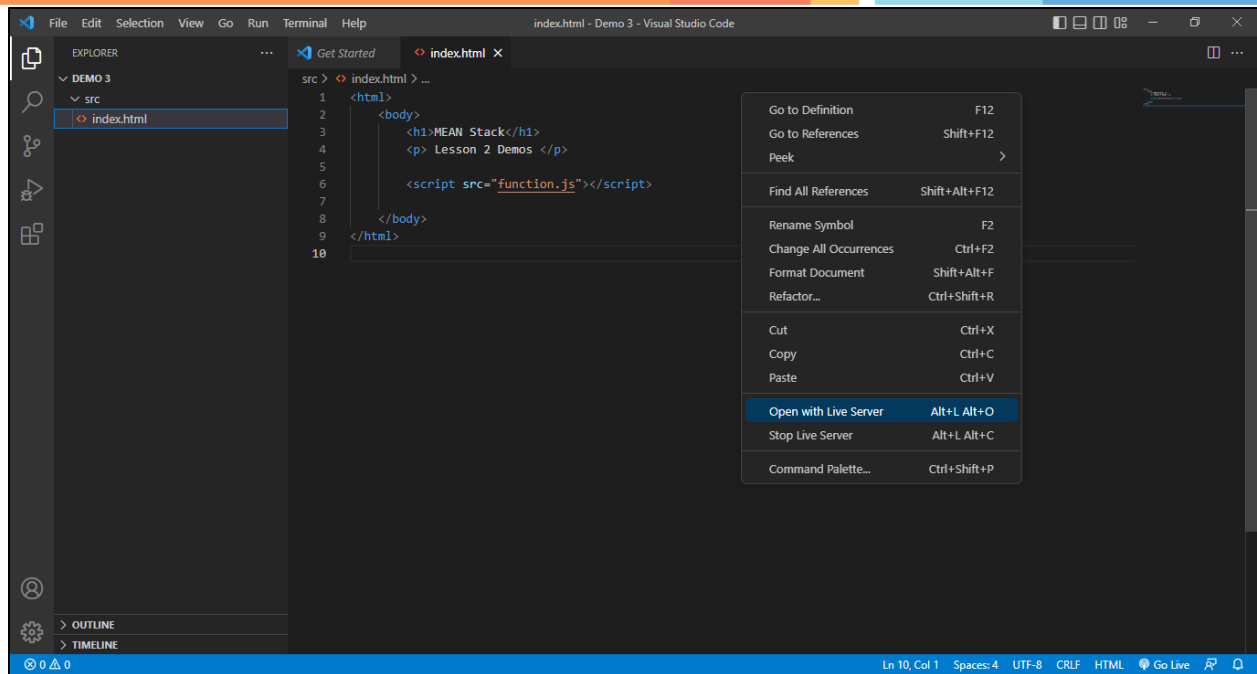
1.5 Save the files.

Step 2: Executing and verifying the working of IIFEs with callbacks and closures:

2.1 Right click on the **index.html** file of the project and select *Open with Live Server*

2.2 When the server starts running, right click and select *Inspect Element* option. Click on
Console tab.