

# IBM – Advanced Diploma on IT, Networking and Cloud Computing

## ELECTIVE MODULE – 03 (PRACTICAL)

1. Set up a basic MEAN Stack project structure with separate folders for front-end and back-end.
2. Create a basic HTML page and link it with AngularJS.
3. Set up a simple AngularJS module and display "Hello World" on the webpage.
4. Implement two-way data binding in AngularJS with a simple input box.
5. Create an AngularJS application that displays a list of items using ng-repeat.
6. Write a code snippet in AngularJS to handle a button click event that shows an alert.
7. Create a basic routing setup in AngularJS using ngRoute to navigate between two simple views.
8. Set up a simple Angular project using Angular CLI and display "Hello World" in a component.
9. Create an Angular component that accepts input data using @Input and displays it on the page.
10. Implement a basic form in Angular that collects user data and logs it to the console on submission.
11. Write a TypeScript program that defines variables of different types (string, number, boolean).
12. Create a simple class in TypeScript with a constructor and a method that returns a string.
13. Write a TypeScript function that takes two numbers as arguments and returns their sum.
14. Set up a basic Node.js server that responds with "Hello World" when accessed through a browser.
15. Create a Node.js script that reads a JSON file and prints its content to the console.
16. Set up a basic Express server that serves a static HTML file.
17. Create a simple RESTful API using Express that handles GET requests and returns a JSON response.
18. Implement a basic route in Express that responds with a "Page Not Found" message for unknown URLs.
19. Write a basic Express middleware function that logs the request method and URL for every incoming request.
20. Create a basic Node.js script that connects to a MongoDB database and logs a success message.
21. Write a Node.js script that inserts a single document into a MongoDB collection using Mongoose.
22. Create a basic HTML form that submits data to an Express server, which logs the form data to the console.
23. Set up a basic Express route that responds with a JSON object containing a list of items.
24. Create an Angular service that returns a hardcoded list of items and displays it in a component.
25. Write a simple TypeScript function that multiplies two numbers and returns the result.
26. Set up a basic Node.js script that prints "Server is running" when started.
27. Create a basic Express application that listens on port 3000 and responds with "Welcome" when accessed.
28. Write a TypeScript program that demonstrates basic usage of arrays by printing a list of numbers.
29. Create a simple Angular component that displays a message passed from the parent component.

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30. Write a Node.js script that uses Express to serve static files from the "public" directory.



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