JavaScript :

-What is JavaScript?

JavaScript is a scripting or programming language that allows you to implement complex features on web pages

-Variable scope

Variables declared inside a { } block cannot be accessed from outside the block

-How to define functions

There is are three types to declare a function:- function declaration, function expression, arrow function,

Function Declaration is the traditional way to define a function. It is somehow similar to the way we define a function in other programming languages. We start declaring using the keyword *“function”.* Then we write the function name and the parameters.

Function Expression is another way to define a function in JavaScript. Here we define a function using a variable and store the returned value in that **variable**.

Arrow functions are been introduced in the **ES6 version** of JavaScript. It is used to shorten the code. Here we do not use the “**function”** keyword and use the arrow symbol.

-Object methods

Object.assign(target, source)

// Creates an object from an existing object
Object.create(object)

// Returns an array of the key/value pairs of an object
Object.entries(object)

// Creates an object from a list of keys/values
Object.fromEntries()

// Returns an array of the keys of an object
Object.keys(object)

// Returns an array of the property values of an object
Object.values(object)

// Groups object elements according to a function
Object.groupBy(object, callback)

-Array methods

Length, toString, at, join, pop, push, shift, unshift,

-Scope of variables and functions, etc

Type Script:

-Understand TypeScript syntax, types (like interfaces, enums), and its benefits over JavaScript.

-Explore advanced features such as decorators, generics, async/await, and modules.

-Learn how to compile TypeScript to JavaScript and integrate with Node.js runtime.

Node.JS :

-What is Node.js

-Node package manager

-difference in Common JS and ES module

-REST API and explore types of API

-CRUD operation with express.js

MongoDB :

-Learn CRUD operations (Create, Read, Update, Delete), schema design, and indexing.

-Explore aggregation framework, transactions (in recent MongoDB versions), and scaling strategies.

SQL/PostgreSQL :

-Understand relational database principles, ACID properties, and normalization.

-SQL syntax for creating databases, tables, and performing CRUD operations

-Explore advanced features like transactions, stored procedures, triggers, and full-text search.

HTML :

-What is HTML?

-HTML latest version

-New tags in HTML

-Different types of HTML tags

-Attributes of HTML, etc.

CSS :

-What is CSS?

-What do you mean by selectors?

-Pseudo-selectors

-Flexbox grid concept, etc.

React :

-What is React?

-Architecture of React

-How React works

-What is lifecycle?

-What is state?

-Different states in real applications, etc