Day :10 JavaScript Notes.

Arrow Functions in JavaScript

Arrow functions provide a shorter and cleaner syntax to write functions in JavaScript, especially useful for simple operations.

Syntax

let func = (arg1, arg2, ..., argN) => expression;

Key Differences from Regular Functions

- No function keyword.
- More concise syntax.
- Useful for simple, single-expression functions.
- Lexically binds this (unlike regular functions), which is useful in certain contexts.

Single-Line Arrow Functions

- **Single parameter**: Parentheses around the parameter can be omitted.

let square = x => x * x;

console.log(square(5)); // Output: 25

- **Multiple parameters**: Parentheses are required.

let add = (a, b) => a + b;

console.log(add(3, 7)); // Output: 10

- **No parameters**: Empty parentheses must be used.

let greet = () => console.log("Hello, world!");

greet(); // Output: Hello, world!

Multiline Arrow Functions

When the function body has multiple statements:

- Use curly braces {} to wrap the function body.
- Use return explicitly to return a value.

Example:

```
let multiply = (a, b) => {
  let result = a * b;
  return result;
};

console.log(multiply(4, 3));  // Output: 12
```