**Give me some idea on what is a Data type. What are Primitive Data types and Non-Primitive Data types. Explain with some examples.**

**Assignment 2211CS010023**

In JavaScript, a **data type** defines the type of value that a variable can hold. JavaScript is a **dynamically typed** language, which means you don’t have to explicitly specify the data type of a variable. The type is determined automatically based on the value assigned.

Types of Data Types in JavaScript

1. **Primitive Data Types**
2. **Non-Primitive Data Types**

### 1. ****Primitive Data Types****

Primitive data types in JavaScript are the most basic types of data. These are immutable, meaning their value cannot be changed after they are created.

#### Primitive Data Types in JavaScript:

**Number**: Represents both integer and floating-point numbers.

let age = 25; // Integer

let pi = 3.14; // Floating-point

**String**: Represents textual data.

let name = "Alice";

**Boolean**: Represents logical values (true or false).

let isAvailable = true;

**Undefined**: A variable that has been declared but not assigned a value.

let x; // Undefined

**Null**: Represents an intentional absence of value.

let y = null;

### 2. ****Non-Primitive Data Types****

Non-primitive (or reference) data types are more complex. They can store collections of values or more complex entities and are mutable.

#### Non-Primitive Data Types in JavaScript:

**Object**: Represents a collection of key-value pairs.

let person = {

name: "Alice",

age: 25

};

**Array**: A special type of object used to store ordered collections of data.

let colors = ["red", "green", "blue"];

**Function**: A block of reusable code that can be called and executed.

function greet() {

return "Hello, World!";

}