Data types in Java and JavaScript

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Data Types in Java:

- **Strongly Typed:** Java is a statically typed language, which means that data types are explicitly declared and checked at compile-time. Once a variable is declared with a specific type, it cannot hold values of any other type without explicit conversion.
- **Primitive and Object Types**: Java has both primitive data and object types.

Primitive type	Object type
• Byte • Short • Long • Int • Float • Char • Boolean	• String • Array • ArrayList • LinkedList • Hashmap • HashSet • List

- **Classes and Objects:** In Java, classes and objects are fundamental concepts. Object-oriented programming principles, such as inheritance, encapsulation, and polymorphism, are core features of Java.
- **Type Inference (Since Java 10):** Java introduced limited type inference with the 'var' keyword in Java 10, allowing the compiler to infer the type of a variable based on its initialization.

Data Types in JavaScript:

It's worth noting that JavaScript is dynamically typed, meaning variables can hold values of any data type without any type enforcement. Additionally, JavaScript uses coercion, which means it can automatically convert data types in certain situations, such as when performing operations between different types.

Primitive type	Non-primitive/complex type
• String • Number • Boolean • Null • Undefined • Symbol	• Object • Array • Function • Date • RegExp

Primitive Data Types:

- String: Represents textual data, e.g., "hello".
- Number: Represents numeric data, e.g., 42 or 3.14.
- Boolean: Represents true or false values.
- Null: Represents the intentional absence of any object value.
- Undefined: Represents the uninitialized value, or absence of value.
- Symbol: Represents unique identifiers. Introduced in ECMAScript 6.

Non-primitive Data Types (Reference Types):

- Object: Represents a collection of key-value pairs. Objects can be arrays, functions, and more.
- Array: A special type of object used to store a collection of data items.
- Function: A callable object that executes a block of code.
- Date: Represents dates and times.
- RegExp: Represents regular expressions for pattern matching.