

Lecture-01: Variables in JavaScript (var, let, const)

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Introduction to Variables:

- Variables are containers that store values in programming.
- In JavaScript, these containers are referred to as variables.

Types of Variables:

1. var
2. let
3. const

Important Note: Avoid using numbers as variable names.

Variable Declaration and Initialization:

- **Declare:** Defining a variable without assigning a value.
- **Initialization:** Assigning a value to a variable.

Examples:

1. **var studentname;** (Declared)
2. **var studentname = "Sana Kiran";** (Initialized)
3. **var name = "Khuzaima Ahmed";** (Declared & Initialized)

Data Types in JavaScript:

- Data types are used to handle data in JavaScript.

Data Types	Description	Example
String	represents textual data	'hello', "hello world!" etc
Number	an integer or a floating-point number	3, 3.234, 3e-2 etc.
BigInt	an integer with arbitrary precision	900719925124740999n 1n etc.
Boolean	Any of two values: true or false	true and false
undefined	a data type whose variable is not initialized	let a;
null	denotes a null value	let a = null;
Symbol	data type whose instances are unique and immutable	let value = Symbol('hello');
Object	key-value pairs of collection of data	let student = { };

For more details on data types: programiz.com/javascript/data-types/

Printing Variables in JavaScript:

```
<script>
  // Variable declaration and assignment
  var studentname = "Sana Kiran";
  var name = "Khuzaima Ahmed";

  // Printing the variables
  document.write(name);    // Output: Khuzaima Ahmed
  document.write(studentname); // Output: Sana Kiran
  console.log(name);       // Output: Khuzaima Ahmed
</script>
```

Note: To open the console, right-click on the structure of your HTML file, and select "Inspect."

Operators:

For more details on JavaScript operators, refer to the following documentation:

<https://tutorialsteacher.com/javascript/javascript-operators/>