

**console.log()** Output data to the console

```
// Print any text or variable
console.log("👋 Howdy!");
// Print inside single or double quotes
console.log('👋 Howdy!');
```

**Comments** Used for documentation

```
// Single line comment
console.log('Hi');
/* Multi-line comment
console.log("Hi"); */
```

**let** Used for variables where value will change

```
let score = 0;
score = 3;
console.log(score); // Output: 3
```

**const** Used for variables where the value is constant

```
const userID = 161803;
console.log(userID); // Output: 161803
```

**Data Types** The five most used data types

```
// Numbers
let year = 2024;
// Strings
let user = "@MrBeast";
// Boolean
let hungry = true;
// Null
let newHire = null;
// Undefined
let startingDate = undefined;
```

**Logical Operators** Evaluate two conditions

```
a && b # true if both conditions are true
a || b # true if one condition is true
!a     # true if the condition is false
```

**Comparison Operators** Compare two values

```
a === b // Strict equal
a !== b // Strict not equal
a < b   // Less than
a <= b  // Less than or equal to
a > b   // Greater than
a >= b  // Greater than or equal to
```

**Arithmetic Operators** Everyday math operations

```
score = 4 + 3 // Addition
score = 4 - 3 // Subtraction
score = 4 * 3 // Multiplication
score = 4 / 3 // Division
score = 4 % 3 // Modulus
score = 4 ** 3 // Exponent
```

**Conditionals** Control the order of code execution

```
if (num > 0) {
  console.log("number is positive");
} else if (num == 0) {
  console.log("number is zero");
} else {
  console.log("number is negative");
}
```

**While Loop** Will run until condition is true

```
let count = 0;
while (count < 5) {
  console.log(count);
  count++;
} // Will print numbers from 0-4
```

**For Loop** Runs based on an iterator variable

```
for (let i = 1; i <= 3; i++) {
  console.log("Beetlejuice!");
}
// Will print "Beetlejuice!" 3 times
```

**Continue** Keyword skips an iteration in a loop

```
for (let i = 0; i < 5; i++) {
  if (i == 1) {
    continue;
  }
  console.log(i);
} // Will print numbers 0-4 except 1
```

**Break** Keyword that ends the loop iteration

```
for (let i = 0; i < 5; i++) {
  if (i == 3) {
    break;
  }
  console.log(i);
}
// Will print numbers 0-2
```