Looping in JavaScript

JavaScript supports several types of loops that allow you to execute a block of code repeatedly.

1. for Loop:

Used when the number of iterations is known.

Syntax:

```
for (let i = 0; i < 5; i++) {

console.log(i);

}
```

2. while Loop:

Executes as long as the condition is true.

Syntax:

```
let i = 0;

while (i < 5) {

console.log(i);

i++;

}
```

3. do...while Loop:

Executes the block at least once before checking the condition.

Syntax:

```
let i = 0;

do {

console.log(i);

i++;
```

} while (i < 5);

4. for...of Loop:

Used to iterate over iterable objects like arrays.

Syntax:

let arr = [1, 2, 3];

for (let value of arr) {

console.log(value);

}

5. for...in Loop:

Used to iterate over object properties.

Syntax:

let obj = {a:1, b:2};

for (let key in obj) {

console.log(key, obj[key]);

}

Tips:

- Avoid infinite loops (ensure conditions eventually become false).

- Use 'break' to exit a loop early.

- Use 'continue' to skip the current iteration.

Looping is essential for performing repetitive tasks efficiently.