Bitwise Operators

Rare ya special cases me aap bitwise operators ka use karoge.

Computer me numbers ya koi bhi data binary me represent hoota hai.

For example:

1 = 00000001

2 = 00000010

Bitwise operators kafi had tak logical operators jaise hi hain lekin wo individual bits pe operate (kaam) karte hain.

Bitwise OR ( | ):

Agar koi bhi bit 1 hooga to result 1 hooga warna result 0 hooga.

1 = 00000001

2 = 00000010

R = 00000011 (3)

Bitwise AND ( & ):

Agar dono bit 1 hoonge to result 1 hooga warna result 0 hooga.

1 = 00000001

2 = 00000010

R = 00000000 (0)

Bitwise XOR ( ^ ):

Agar dono bit alag hoonge to result 1 hooga warna result 0 hooga.

1 = 00000001

2 = 00000010

R = 00000011 (3)

JavaScript me inke alawa aur bhi bitwise operators hain lekin realworld me unka utna use nahi hai.

Real World Example:

|  |  |  |
| --- | --- | --- |
| **Permission** | **Binary Value** | **Decimal Value** |
| Read (R) | 00000100 | 4 |
| Write (W) | 00000010 | 2 |
| Execute (E) | 00000001 | 1 |

const readPermission = 4;

const writePermission = 2;

const executePermission = 1;

let myPermission = 0;

myPermission = myPermission | writePermission;

let message = (myPermission & readPermission) ? “Yes” : “No”;

console.log(message);