

Bitwise Operators

Everything in computers is constructed out of bits. At least the modern computers that we work with all work with bits. A bit is a value that can either be 0 or 1 but not both. Any data type in Dart is constructed out of a series of bits that either contain the exact data behind the value or they contain a pointer to where the data is stored. Bitwise operators allow you to manipulate these bits at a low level.

Further reading:

- [Bitwise and shift operators - dart.dev](#)
- [Dart Bitwise operators - W3Schools | W3Adda](#)
- [Bitwise and Shift Operators in Dart - learndartprogramming](#)
- [Dart Operators - Javatpoint](#)
- [Bitwise and Shift Operators - Flutter by Example](#)



Examples

```
1 final value1 = 0x01;
2 final value2 = 0x02;
3 // value3 will be 0001 AND 0010 = 0000 (0)
4 final value3 = value1 & value2;
5 // value4 will be 0001 OR 0010 = 0011 (3)
6 final value4 = value1 | value2;
7 // value5 will be 0001 XOR 0010 = 0011 (3)
8 final value5 = value1 ^ value2;
9 // value6 will be ~0001 = 1110 (-2 integer)
10 final value6 = ~value1;
```