

Bit manipulation in C



Constants in hexadecimal notation:

```
unsigned a = 0x000f; // a = 15; (32 bits)
```

Printing in hexadecimal format:

```
printf("%x\n", a);
```

Print the bit pattern of an integer

```
printf("%x", i);
```

Example:

`i = 43`

output: 2b

Bit operators

- << Shift bits left, vacated bits are set to zero
- >> Shift bits right, vacated bits are set to zero or to sign bit

- & Bitwise AND
- | Bitwise OR
- ^ Bitwise exclusive OR

- ~ Bitwise negation (change every bit)