Octal Number System

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Decimal.

10^2 10^1 10^0
7 2 3

Why 10. Because we have 10 digits in decimal.

Octal no system

0 1 2 3 4 5 6 (7) → Biggest using octal.

10
$0 \times 8^0 = 0 \times 1 = 0$
$1 \times 8^1 = 1 \times 8 = 8$ +
8

In JS this is how we are write octal number

0o10
zero 0 Ten.

12
$2 \times 8^0 = 2 \times 1 = 2$
$1 \times 8^1 = 1 \times 8 = 8$ +
10 (in octal)

In old time 0 (zero) before any number makes a number octal number system.

Console.log(012 + 2) = 12 (JS)

0o237 → octal.
$7 \times 8^0 = 7 \times 1 = 7$
$3 \times 8^1 = 3 \times 8 = 24$
$2 \times 8^2 = 2 \times 64 = 128$ +
159 → Decimal.

512 64 8 1 64 512 2048

512 64 8 1

0 0 4 5 2 7

2048 + 320 + 16 + 7

= 2391

64 × 5 = 320

512 × 4 = 2048

2048 + 320 + 16 + 7 = 2391

1 2 3

3 × 8^0 → 3

2 × 8^1 → 16

1 × 8^2 → 64

83