

★ number system

↳ decimal $\rightarrow 10 - [0, 9]$

↳ Binary $\rightarrow 2 - [0, 1]$

↳ Octal $\rightarrow 8 - [0, 7]$

39 \rightarrow

2	39	- 1	$\times 10^0$
2	19	- 1	$\times 10^1$
2	9	- 1	$\times 10^2$
2	4	- 0	$\times 10^3$
2	2	- 0	$\times 10^4$
2	1	- 1	$\times 10^5$
	0		

100111

$\rightarrow 1 \times 10^0 + 1 \times 10^1 + 1 \times 10^2 + 0 \times 10^3 + 0 \times 10^4 + 1 \times 10^5$

$1 + 10 + 100 + 0 + 0 + 100000$

1
10
100
1000
10000
100000

10^0
mul = 1
sum = 0

while(n > 0) {

$rem = n \% 2$
 $sum = sum + rem * mul$
 $n = n / 2$
 $mul = mul * 10$

}

100000
100
10
1

100111

2	5	- 1
2	2	- 0
2	1	- 1
	0	

101

des number gem szc ^{power++} sum

10	100111	→ 1 × 2 ⁰ = 1
10	10011	→ 1 × 2 ¹ = 2
10	1001	→ 1 × 2 ² = 4
10	100	→ 0 × 2 ³ = 0
10	10	→ 0 × 2 ⁴ = 0
10	1	→ 1 × 2 ⁵ = 32
	0	
		<u>39</u>

25

→ 1
 → 11
 → 121
 → 1331
 → 14641
 15101051