S3-Template

27 August 2025 11:40

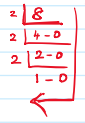
★ Method 1:

$2^8 = 2*2*2*2*2*2*2*2 = 256$

★ Method 2: Exponential Method

1. Convert the exponential number from Decimal to Binary
2. Process the numbers from right to left
3. Process the result only when number is odd
4. But keep accumulating the base

Decimal To Binary



Binary (R to L)	Curr Base	Res = Res * Base, for odd	Next Base (Base = Base * Base)
	2	1	
0	2		4
0	4		16
0	16		256
1	256	256	65536

1. Above using Exponent in Binary Form
2. Below using Exponent in Decimal Form

Check whether given number is odd or even.

Repeat the same after dividing it by 2 till the quotient is greater than 0

eg. 8

Quotient

Check whether given number is odd or even.

Repeat the same after dividing it by 2 till the quotient is greater than 0

eg. 8

Quotient

8 is even. 8/2 = 4
4 is even. 4/2 = 2
2 is even. 2/2 = 1
1 is odd. 1/2 = 0

Which handwriting is better (above or below)

Check whether given number is odd or even.

Repeat the same after dividing it by 2 till the quotient is greater than 0

eg. 8

8 is even. 8/2 = 4
4 is even. 4/2 = 2
2 is even. 2/2 = 1
1 is odd. 1/2 = 0