MATHS...

video-12

Leetcode - 168

Easy

Excel Sheet

Column Title ...

Company :- Meta Microsoft Zenefits

168. Excel Sheet Column Title

Given an integer columnNumber, return *its corresponding column title* *as it appears in an Excel sheet.*

For example:

```
A -> 1
B -> 2
C -> 3
...
Z -> 26
AA -> 27
AB -> 28
...
```
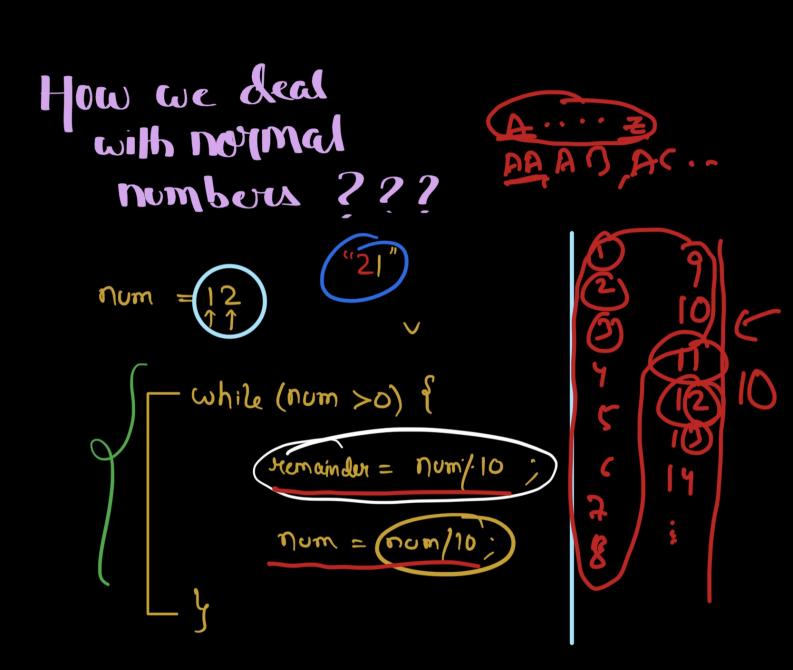
Ex:-

$$\frac{1}{A} \Bigg| \frac{2}{B}$$

Ex:- (28)

↳ AB

1	2	3 ...	26	27	28	
A	B	.....	Z	AA	AB	AC. —

Numbers:-

How we deal
with normal
numbers ? ? ?

A · · · · Z

AA AB AC ..

$num = 12$

"21"

$\lor$

while (num > 0) {

remainder = num % 10 ;

num = num / 10 ;

}

1
2
3
4
5
6
7
8

9
10
11
12
13
14
:

← 10

Similarly Deal with

Excel Numbers :-

×

ColumnNo = 28

result = 'BA'

while (ColumnNo > 0) {

'AB'

ColumnNo--;

$log_2(num)$

$\left(log_{26}(colu)\right)$

remainder = ColumnNo % 26 ;

result += remainder + 'A' ;

ColumnNNo = ColumnNo/26 ;

}

(66) + (25) = Z

A → 1
B → 2
C → 3

A = (66)

remainder + 'A' =

$A = \boxed{66} \; ^{'}\!\!I^{'}$

$B = 67$

$C = 68$

$D = 69$

remainder $+ \; 'A' =$

$\textcircled{1} + \; 'A' = 67 - 1$

$\dfrac{'A'}{66}$

$= 66$

$\textcircled{2} + \; 'A' = 68 - 1 \quad = \boxed{67}$

$\underline{\underline{B}}$

$A \to 1$

$B \to 2$

rem $= \textcircled{3} + \; 'A' = \underline{69 - 1}$

$C \to 3$

$= 68$

Full Dry Run :-

```
while ( n > 0 ) {
    n-- ;
```

Full Dry Run :-

```
while (n > 0) {

    n--;

    remainder = n % 26;

    result += remainder + 'A';

    n = n/26

}

    reverse result;

    return result;
```