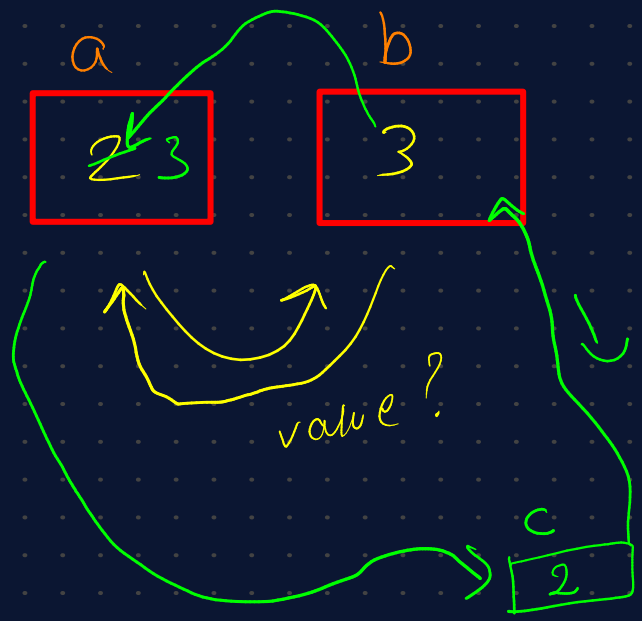
(Class -> 5)

(11th May) 2024

(Swap of no)




```
int a = 2;
b = 3;
c = 0;
c = a;
a = b;
b = c;
```

no swap done

(Don't use 3rd var)

```
a = a+b;
a = 5
b = a-b;
b = 2
a = a-b;
```

without 3rd var

(Fibo) a+b ⑧

a+b ⑧

0 1 1 2 3 5 8 13 - - -

1 element

2 3 4

(Logic) ?

(Loop) ☑

St. value = 0

Resultant value ⇒ Last 2 ko Add karke

n=3

a b R

0 1 1

n times

(R = a+b) ☑

3

n = (n-1) + (n-2)

value value

(Flowchart) Pseudocode

0 1 1 loop

(0 → n)

loop → 3

a b r

0 1 1 2 3 - - -

b = r ;

a = b ;

a, b, n

↳ n input ✓

↳ a+b ⑦ n times → Result Store

↳ Result

```
for (int i = 3; i <=n; i++)
{
    sum = a + b;
    cout << sum << " ";
    b = sum;
    a = b;
}
```

reverse to solve Corrat

n = 6

i	a	b	Sum
3	0	1	1
4	1	1	2
	2	2	

Prob

Sol

Output

1 2

Break ☑

Contine ☑

(Variable & Scope)

```
main()
{   int a = 4;

    LoL ()
    {
        int a = 2;
        cout << a;
    }
}  →  exist ✗
```

use karlega

absent

Jis v function me local var bna rhe

Agr koi ^var bna rhe hai toh

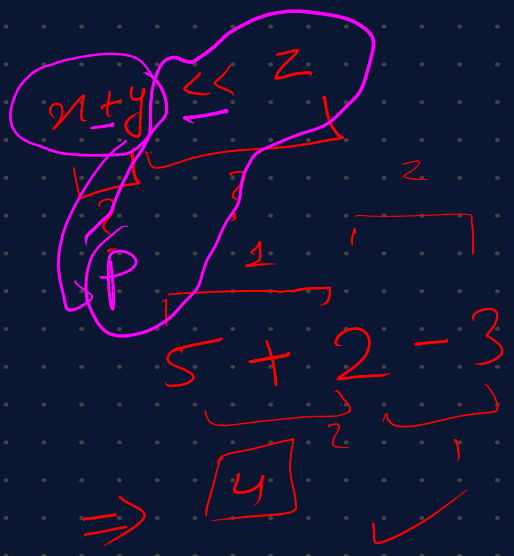
wo function khtm hone par

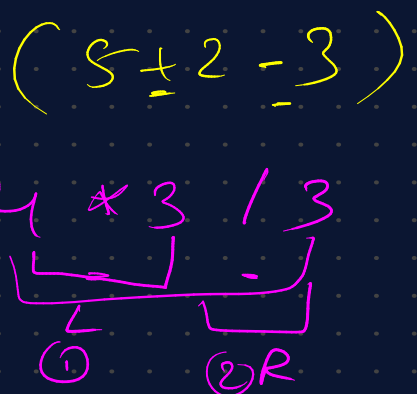
gyab ho jayega.

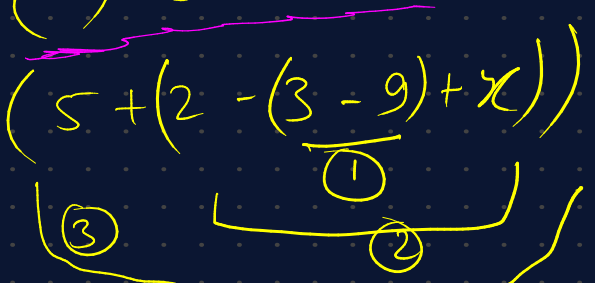
```
main() {
    int a = 2
    ( ) a = 2;      error
}
```

Next page ↓

Category	Operator	Associativity
Postfix	() [] -> . ++ - -	Left to right
Unary	+ - ! ~ ++ - - (type) * & sizeof	Right to left
Multiplicative	* / %	Left to right
Additive	+ -	Left to right
Shift	<< >>	Left to right
Relational	< <= > >=	Left to right
Equality	== !=	Left to right
Bitwise AND	&	Left to right
Bitwise XOR	^	Left to right
Bitwise OR	|	Left to right
Logical AND	&&	Left to right
Logical OR	||	Left to right
Conditional	?:	Right to left
Assignment	= += -= *= /= %= >>= <<= &= ^= |=	Right to left
Comma	,	Left to right







Leetcode (1)

→ Q. → 281

(Subtract the Product and sum of digit of a no)

Given an integer number n, return the difference between the product of its digits and the sum of its digits.

n ← digit → Product
→ sum

P - S Ans

Diya Jayega i/p

n = 2 3 4

P = 2 × 3 × 4 = 24

S = 2 + 3 + 4 = 9

(24 - 9) = (15) Ans

1. understand Q ?
2. Given values ?
3. Examples
4. Constraint => `1 <= n <= 10^5`

Leetcode APP -

$(1 <= \text{Integer} <= 10^5)$

Integer (-ve) ☒

Integer > 10^5 ☒

(Range of Integer)

=> min val = 1
Max = 10^5

Quest -> 1 { und
Giv
Example
const
Rough logic X -> code!
(10 min)
Discussion
See
(10 min)
Rough logic -> code!
(solution dekho)
code karenge khud se
Bookmark -> Bad me fir se

n => 234 ← ek sath

sum = 0

product = 1

2 × 3 × 4

p =>

2 + 3 + 4

s =>

(Alag no hai)

ek sath ——> Alag kase kare?

234 ——> 2

——> 3

——> 4

kase kare?

?

Integer ray

n range

Input range

1 <= n <= 10^5

koi v value do

toh o/p ☑

234 -> Alag. sum/prod ✓

(234 %10) -> 4

divide

10) 234 (23
20
34
30
4

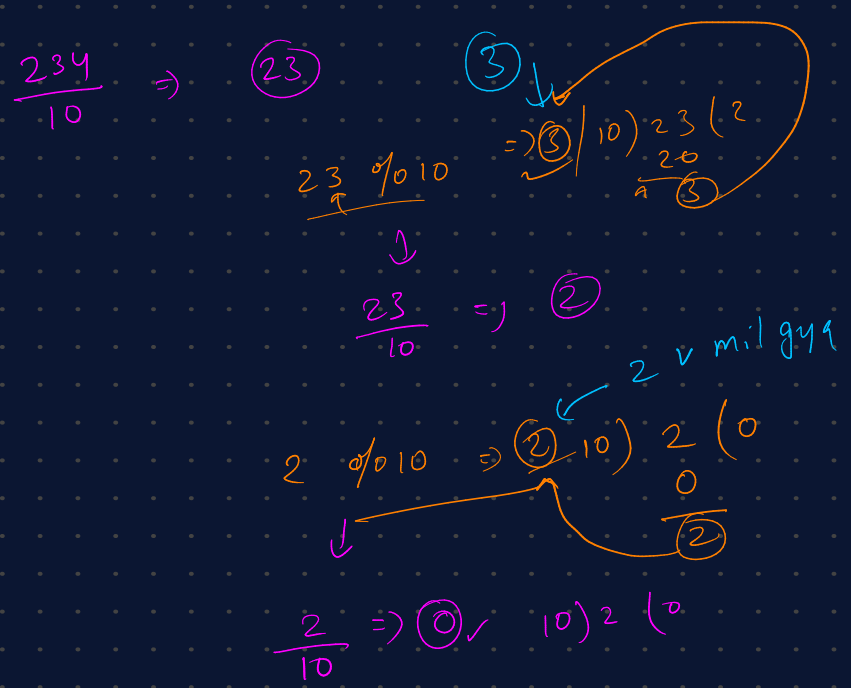
Remainder -> 4 -> milgya

modulo

int 5 / int 10 => 0 ✓

i = i+1 valid

(i+1) not valid



234 → Procen

4 ① i
3 ② i
2 ③ i

4+3+2

4x3x2

Pro, Sum ✓

Sub —

Congratulations!

Ichud se banana ka baad (adv me)