The Misadventures of Mr Beancurd

Mr Beancurd(aka iamgay aka thegayman aka Bernerd Gwee) is very bad at math and he needs help with his math homework. Help him code a calculator that does not use arithmetic operators. As he needs time to post a lot of clarifications on dunjudge.me, he needs to operations to be fast. Please help him with his homework so you can rub it in his face later.
Note: Use fast I/O:

```
cin.tie(0);
ios::sync_with_stdio(0);
```

This problem is part of the Beancurd Series by jzh, bcy and ywh.

Input details

Input consists of one number N denoting the number of operations.
N lines follow with the format, where A, B, and C denote variables and op denotes the operation to execute:
“A op B = C”

Output details

For N lines,
If the sum is correct, output ‘Yas’
Else output ‘No’
Sample input
6
1 + 2 = 3
2 - 1 = 4
-4 * 2 = 8
6 / 2 = 3
10 % 3 = 2
8 ^ 2 = 64
Sample output
YAS
NOPE
NOPE
YAS
NOPE
YAS

Limits/Scoring

All integers will fit into a 64 bit signed integer(long long)
Subtask 1(5%): Only required to handle + and - operations, handles positive integers.
1<=N<=10 000

Subtask 2(10%): Required to handle multiplication, positive integers
Same Limits as above.

Subtask 3(15%): Required to handle division,modulo, and exponents, positive integers.
Same Limits as above.

Subtask 4(20%): Handles negative integers.
Same Limits as above.

Subtask 5(50%): Handles up to 64 bit negative integers.
1<=N<=1 000 000

Time Limit 0.5s
Memory Limit 8MB