1245 – Harmonic Number (II)

I was trying to solve problem **'1234 – Harmonic Number'**, I wrote the following code

```
long long H( int n ) {
    long long res = 0;
    for( int i = 1; i <= n; i++ )
        res = res + n / i;
    return res;
}
```

Yes, my error was that I was using the integer divisions only. However, you are given **n**, you have to find **H(n)** as in my code.

Input

Input starts with an integer **T (≤ 1000)**, denoting the number of test cases.

Each case starts with a line containing an integer **n (1 ≤ n < 2^{31})**.

Output

For each case, print the case number and **H(n)** calculated by the code.

Sample Input	Output for Sample Input
11 1 2 3 4 5 6 7 8 9 10 2147483647	Case 1: 1 Case 2: 3 Case 3: 5 Case 4: 8 Case 5: 10 Case 6: 14 Case 7: 16 Case 8: 20 Case 9: 23 Case 10: 27 Case 11: 46475828386