Collatz Count

Given an integer n, count the number of steps it takes to reach 1 using the Collatz conjecture.

Collatz Conjecture: Starting with any positive integer n, repeatedly apply the following operation:

- If n is even, divide it by 2: $n \leftarrow n/2$
- If n is odd, multiply by 3 and add 1: $n \leftarrow 3n + 1$

The conjecture states that this sequence will always eventually reach 1, regardless of the starting value.

Input Format

an integer n

Output Format

return a single integer

Constraints

- $1 \leq n \leq 10^9$

Sample Input

```
n=10
```

Sample Output

```
6
```

Explanation

- $10 \to 5 \to 16 \to 8 \to 4 \to 2 \to 1$

Implementation

Goal: Fill in the following function:

```
def collatz_count(n: int) -> int:
    ...
    return ...
if __name__ == "__main__":
    # You can test anything inside this block and can send it to grader
    # The grader will use only the function that you have implemented
    # !!! DO NOT write anything outside this block
    print(collatz_count(10))
```