```
function sum_to_n_a(n: number): number {
        let sum = 0;
        for (let i = 1; i <= n; i++) {
                sum += i;
       }
        return sum;
}
function sum_to_n_b(n: number): number {
        return (n * (n + 1)) / 2;
}
function sum_to_n_c(n: number): number {
        if (n <= 1) {
                return n;
        }
        return n + sum_to_n_c(n - 1);
}
```