Output:

```
n = 12: 650
n = 20: 2870
```

Recurrence Relation and Stop Condition:

- T(n) = 1 + T(n-1) and T(1) = 1

Big Oh Complexity:

- Back Substitution

Replace n with (n-1):

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

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

Replace n with (n-2):

T(n-2) = 1 + T((n-2) - 1)
T(n-2) = 1 + T(n-3)

T(n) = 1 + 1 + 1 + T(n-3)

General Formula:

T(n) = k + T(n-k)

Stop Condition:

n - k = 1 → **k = n - 1**

T(n) = n - 1 + T(n- (n - 1))
T(n) = n - 1 + T(1)
T(n) = n - 1 + 1 = n

Big Oh Complexity:

O(n)