```
1 int sum(int n) {
2   if (n == 0) {
3      return 0;
4   } else {
5      return n + sum(n - 1);
6   }
7 }
```

```
5 + 4 + 3 + 2 + 1 = 15
5 + 4 + 3 + 2 + 1
4 + sum(3)
3 + 2 + 1
3 + sum(2)
2 + sum(1)
2 + 1
return 1
```

1 int sum(int n) {

if (n == 0) {

} else {

return 0;

return n + sum(n - 1);

$$F(w) = \begin{cases} 0, & v_1 = 0 \\ n + F(w-1), & v_{71} \end{cases}$$

```
+ let n=5:
```

=> Sum (5) = 5+ Sum (5-1)

= 5+ Sum(4)=5+4+Sum(4-1)

=5~4+ Sim(3)=5+4+3+ Sum(3_1)

= 5+4+3+ Sum(2)=5+4+3+2+Sum(2-1)

= 5+4+3+2+ Sum(1) = 5+4+3+2+1+ Sum(1_1)

=5+4+3+2+1+5um(0)=5+4+3+2+1+0=15