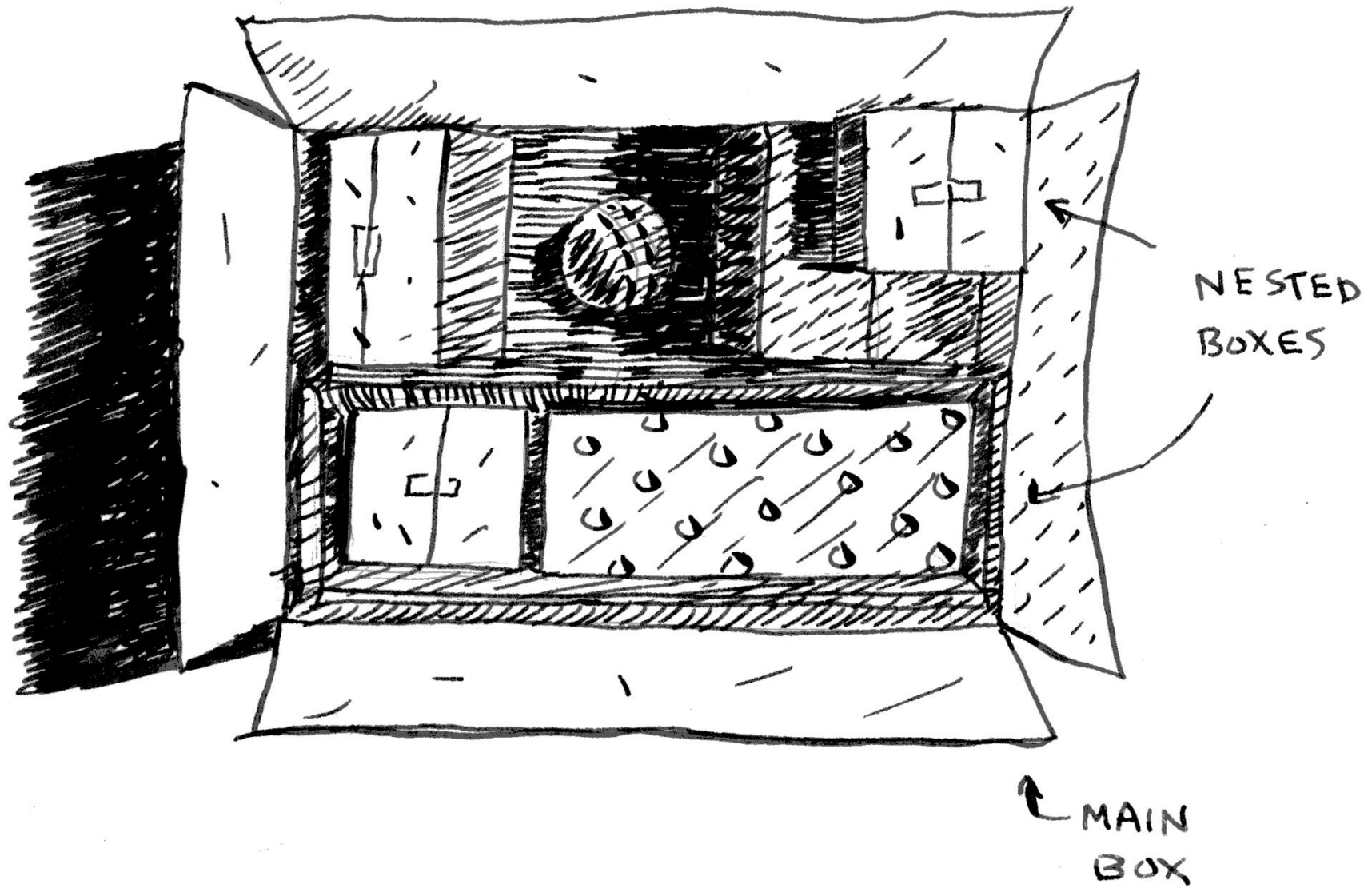
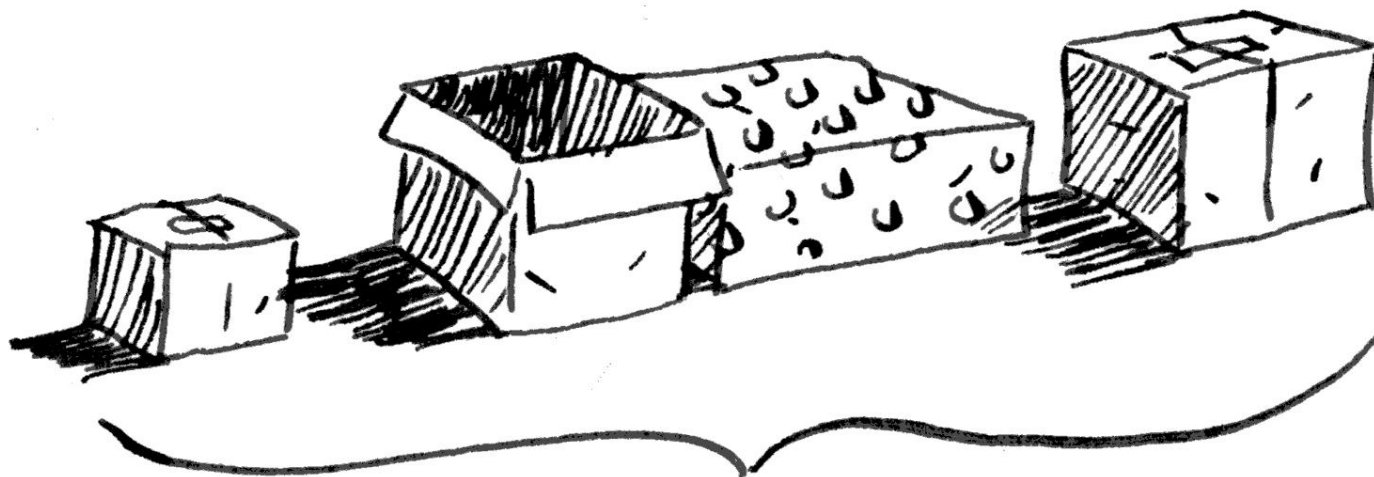


Fungsi Rekursi

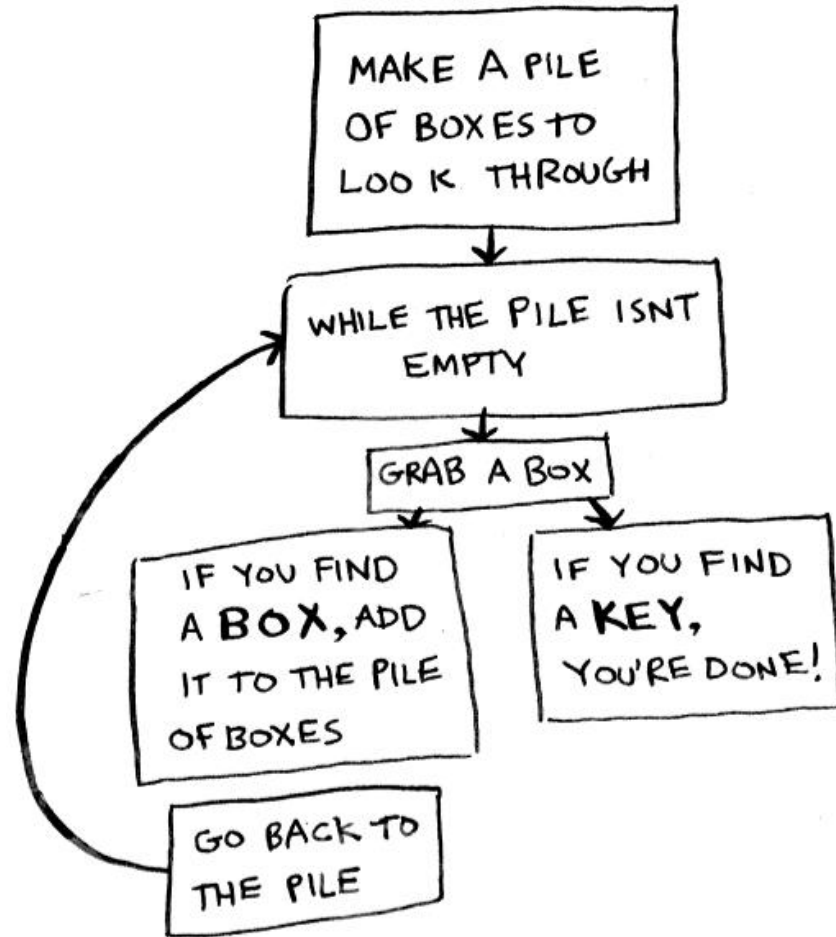


THE NEXT
BOX TO
SEARCH

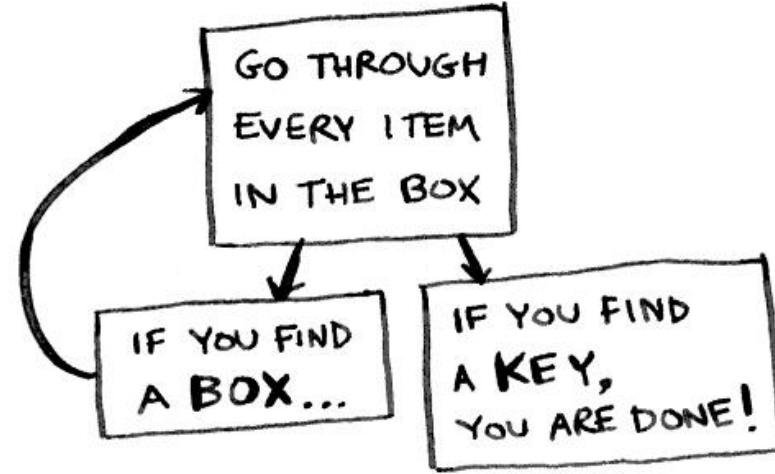


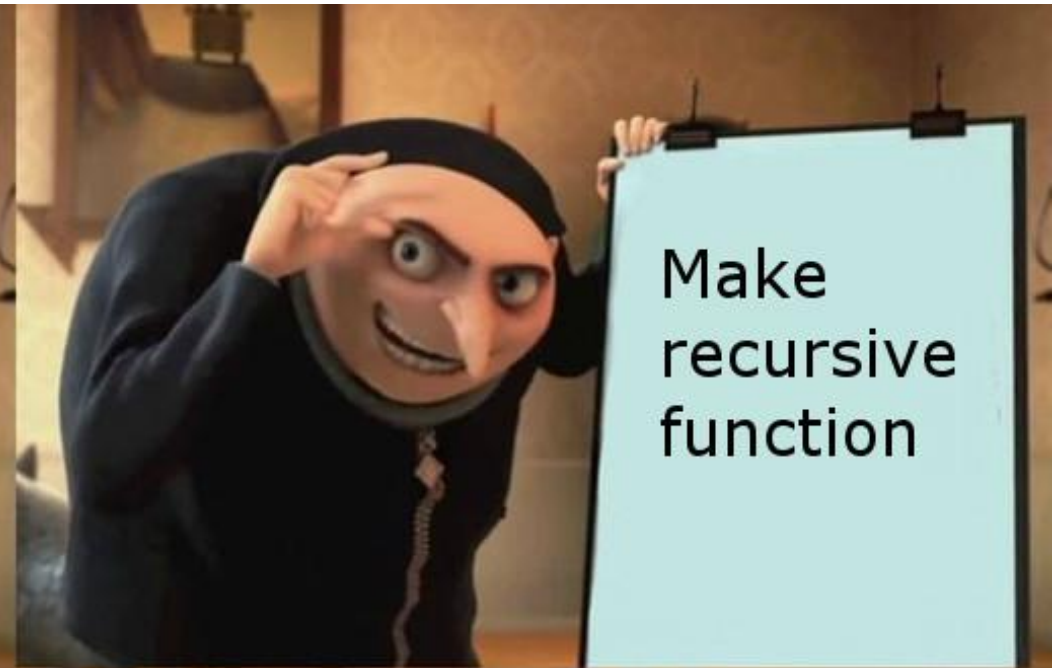
PILE OF BOXES

Iterative Approach



Recursive Approach





Fakotorial

Basis

$$f(n) = n!$$

$$n = 0, 1; f(n) = 1$$

$$n > 1; f(n) = n * (n-1)!$$

Rekursi

Iteratif

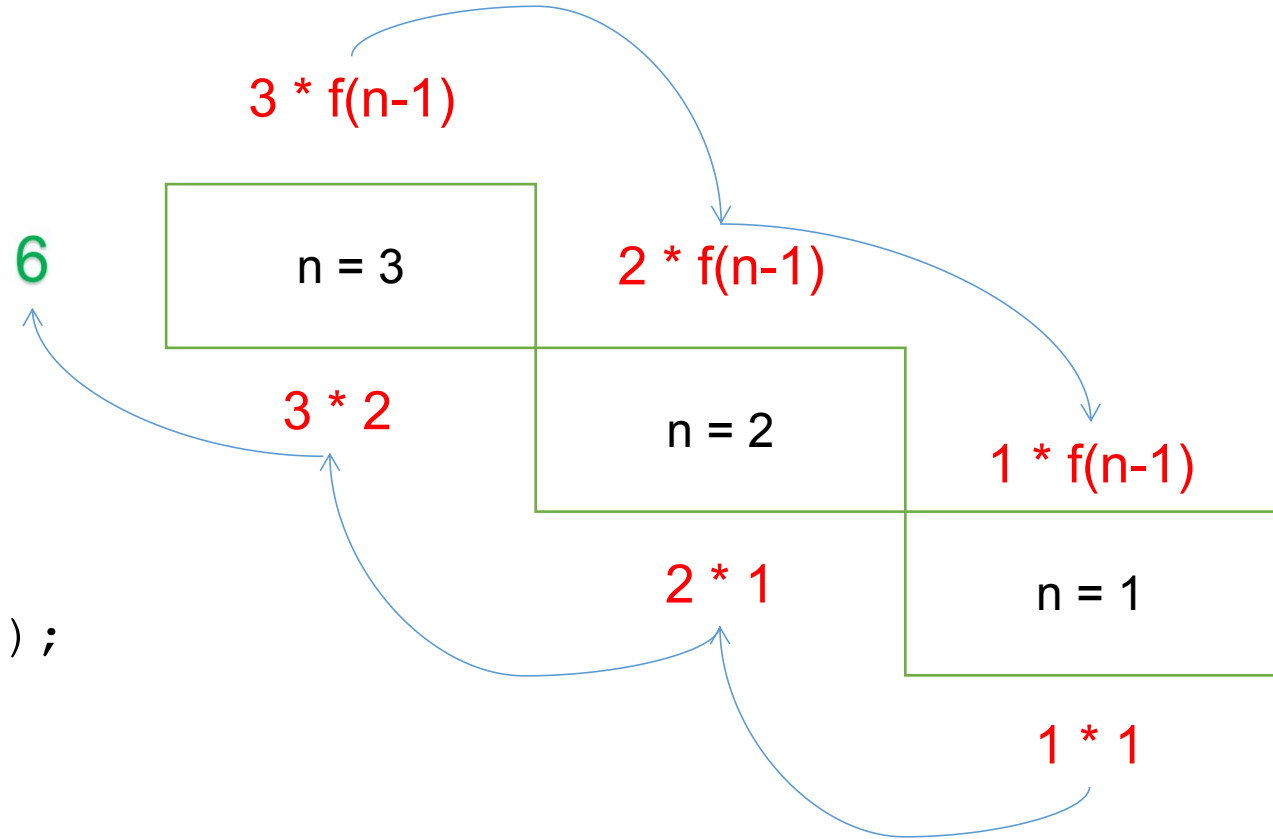
```
int faktorial(int n) {  
    int result = 1;  
  
    for(int i=1; i<=n; i++) {  
        result *= i;  
    }  
    return result;  
}
```

Rekursi

```
int faktorial(int n) {  
    if(n == 1) {  
        return 1;  
    }  
    return n * faktorial(n-1);  
}
```

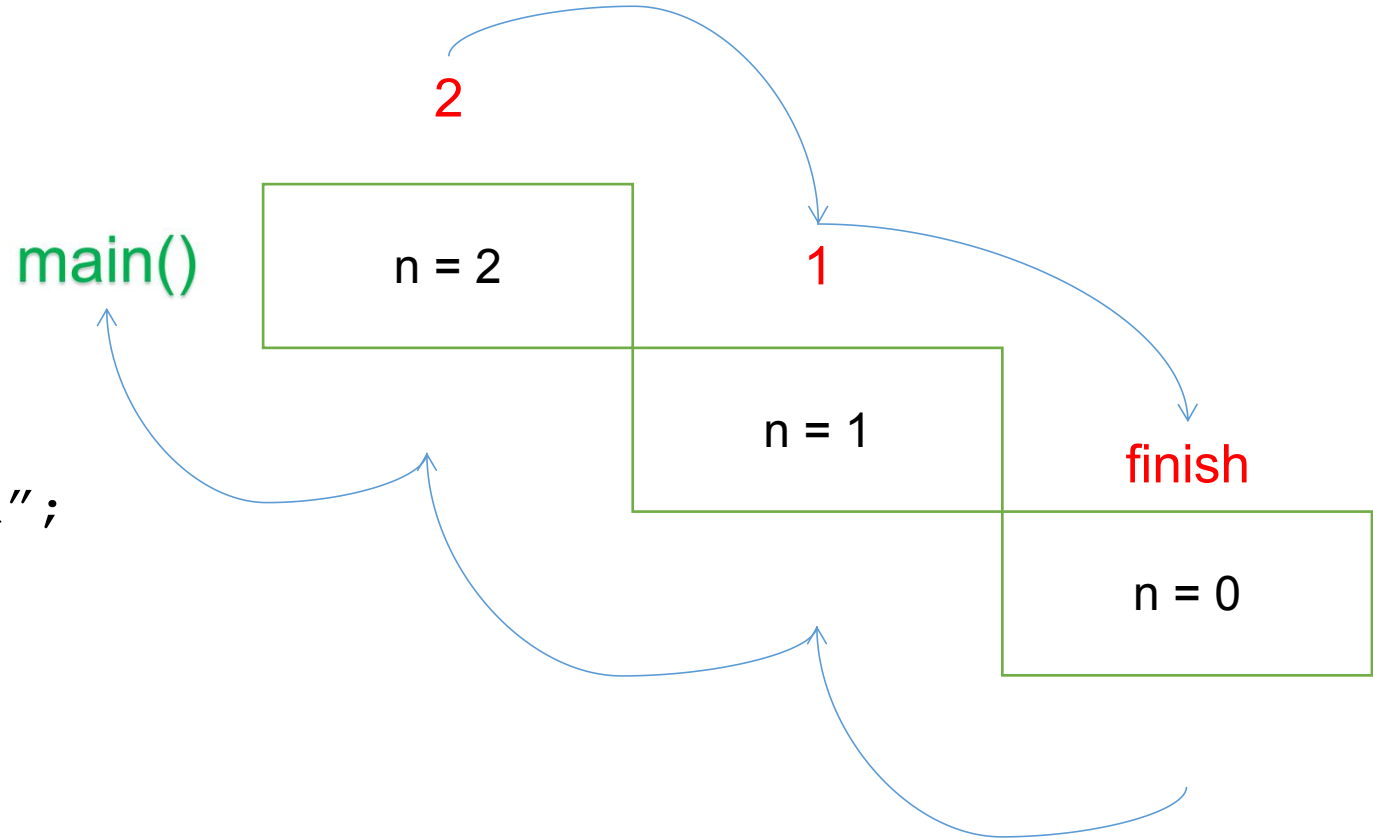
Execution flow

```
int faktorial(int n) {  
    if(n == 1) {  
        return 1;  
    }  
    return n * faktorial(n-1);  
}
```



Execution flow

```
void countDown(int n) {  
    if(n == 0) {  
        cout << "finish\n";  
    }  
    cout << n << endl;  
    countDown(n-1);  
}
```



Execution flow

```
void countUp(int n) {  
    if(n == 0) {  
        cout << "start\n";  
    }  
    countUp(n-1);  
    cout << n << endl;  
}
```

