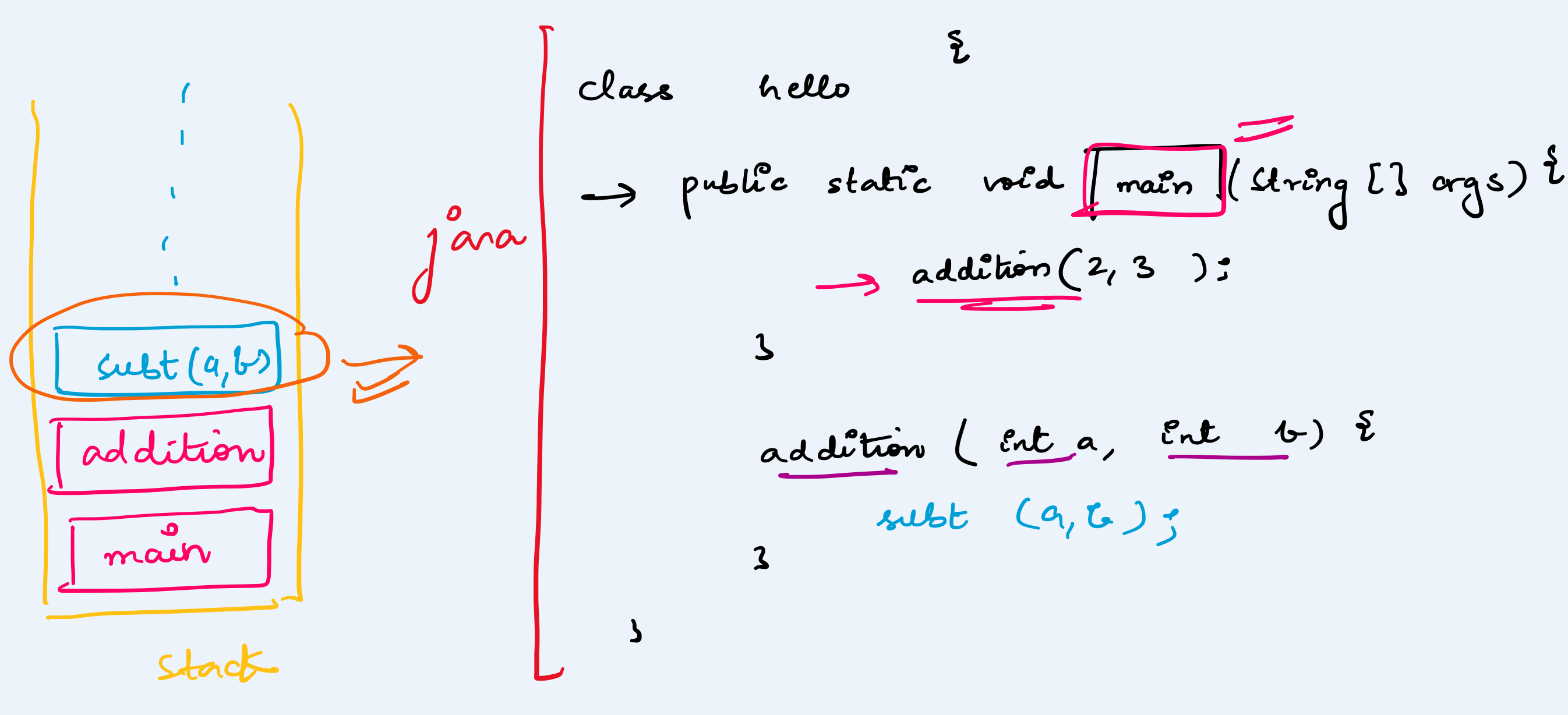


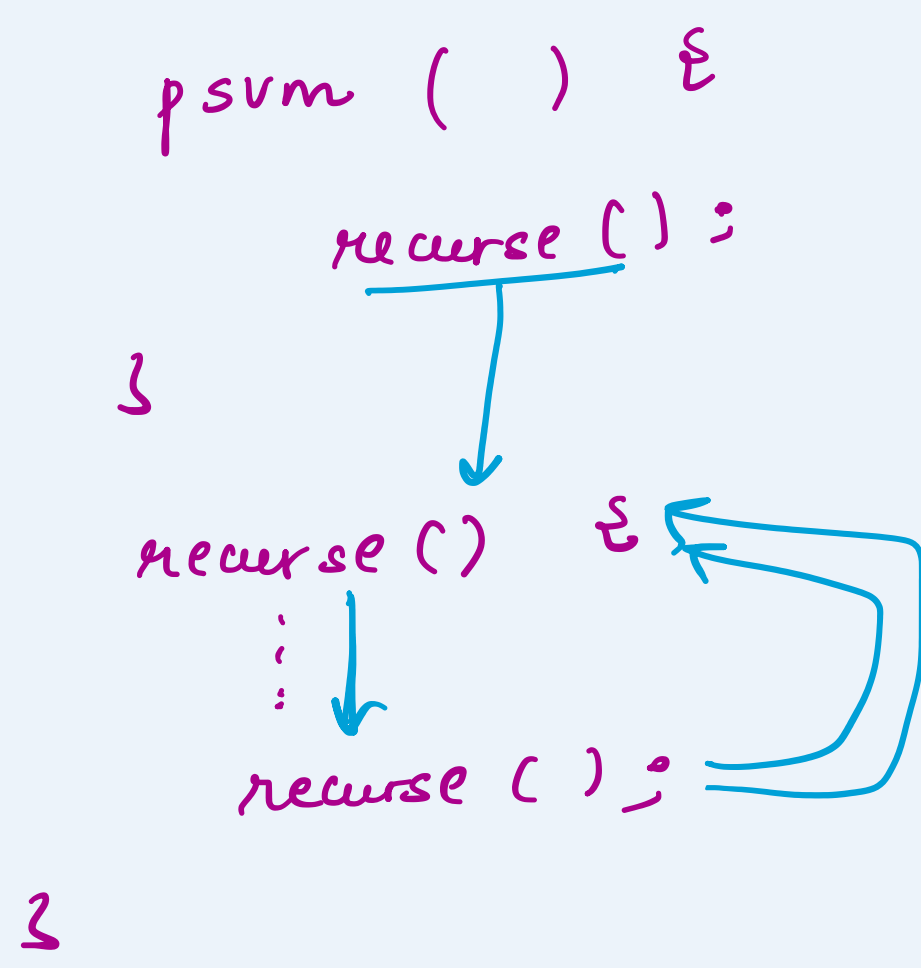
## Recursion



- JVM**
- Stack**
    - used to store order of method execution
    - local variables
    - RAM
  - Heap**
    - stores objects
    - dynamic memory allocation

## Recursion

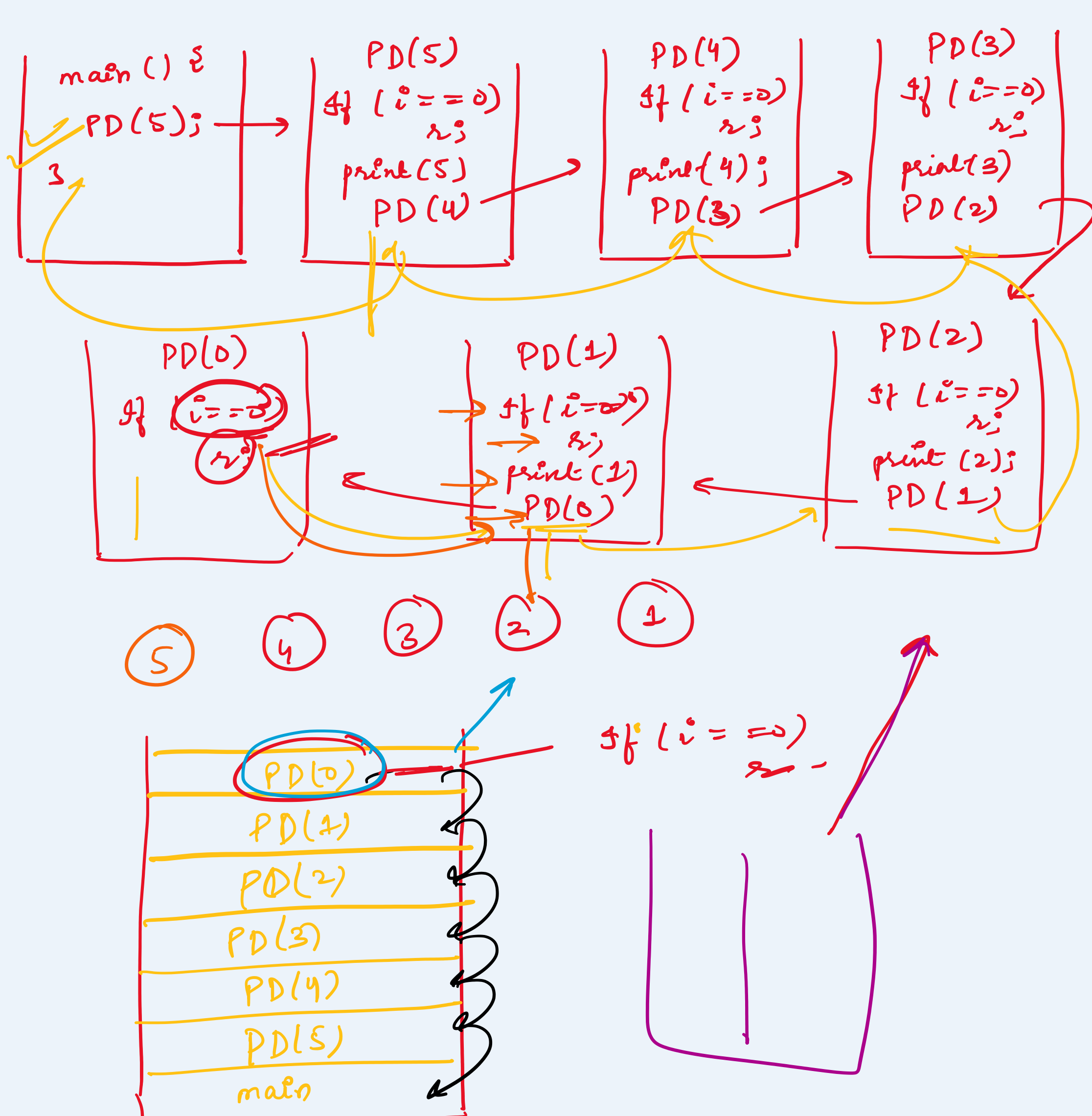
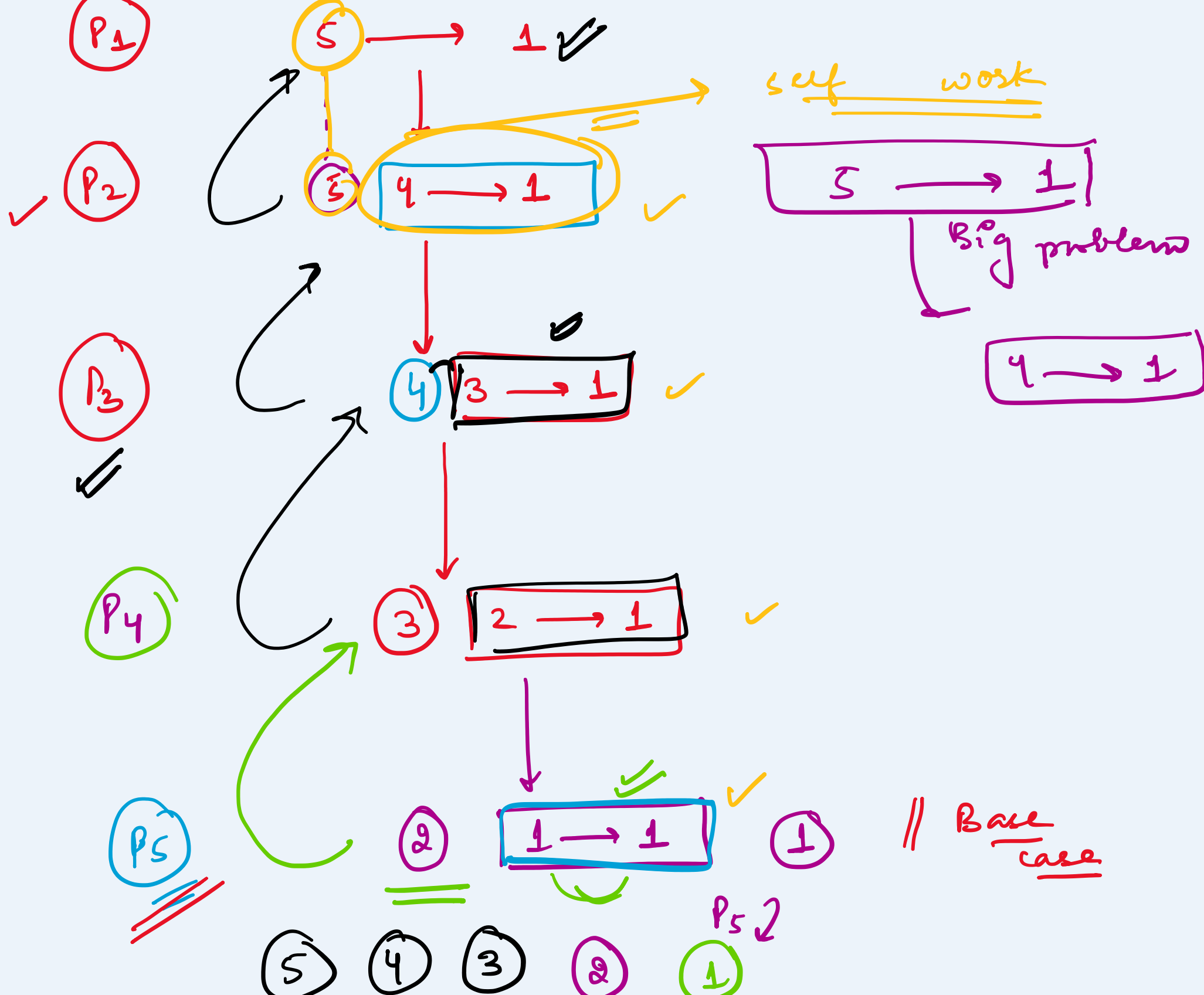
- method calling itself is called a recursive method.
- process is known as recursion.



### 3 conditions

- ✓ Recursive call
- Base case
- self work

Q Print the no from 5 → 1. (using recursion)



Q

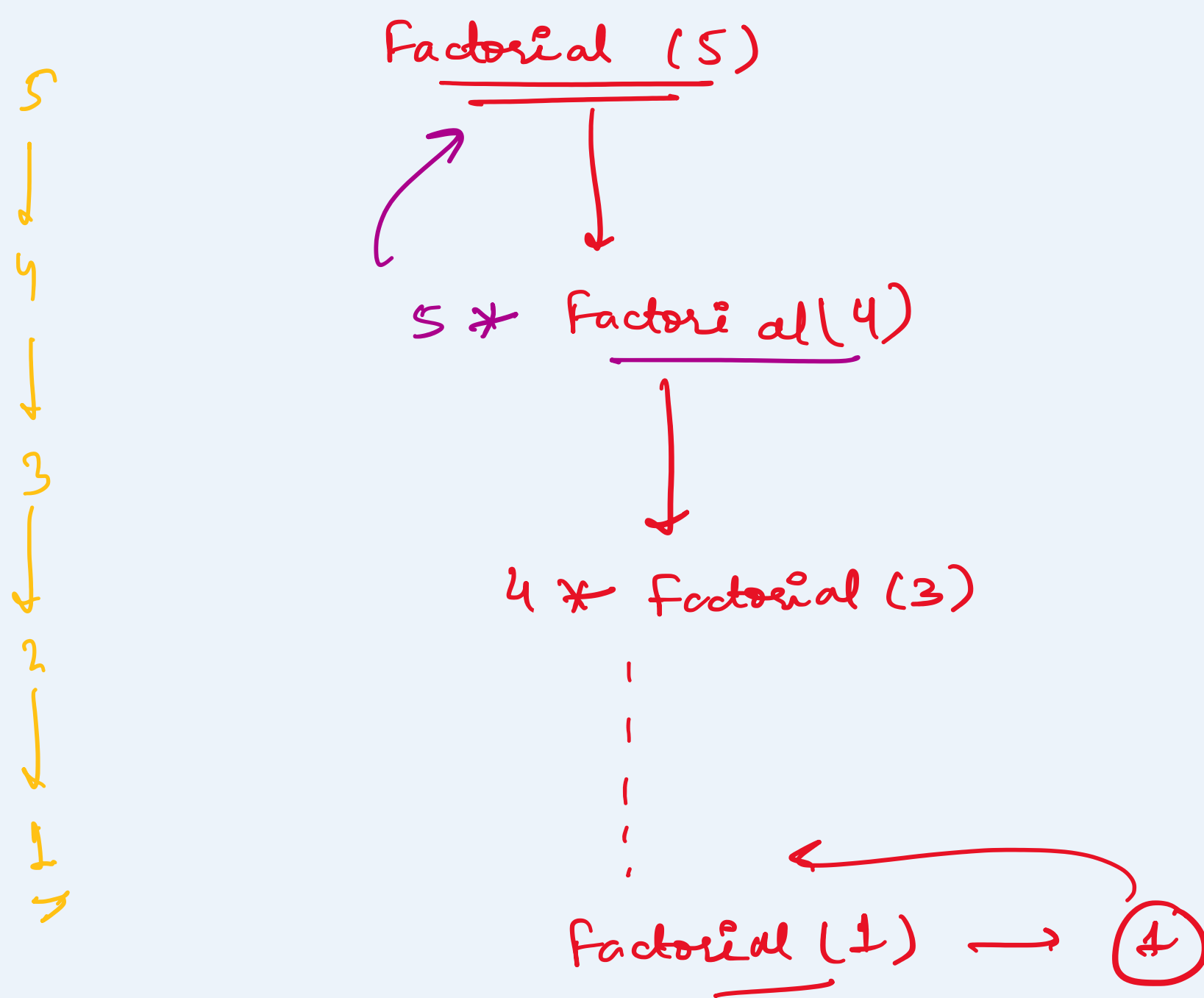
## Factorial

Factorial (5) → 120

$$5! = 5 \times 4 \times 3 \times 2 \times 1$$

$$4! = 4 \times 3 \times 2 \times 1$$

$$6! = 6 \times 5 \times 4 \times 3 \times 2 \times 1$$



## Fibonacci

