

## STACK + HEAP IN JAVA

- RAM memory is separated into at least two parts
  - STACK (each Thread has its own stack)
  - HEAP (one shared heap between all Threads)

should not be confused with the data structure "stack" although they function the same

## WHAT DO THEY CONTAIN?

### STACK

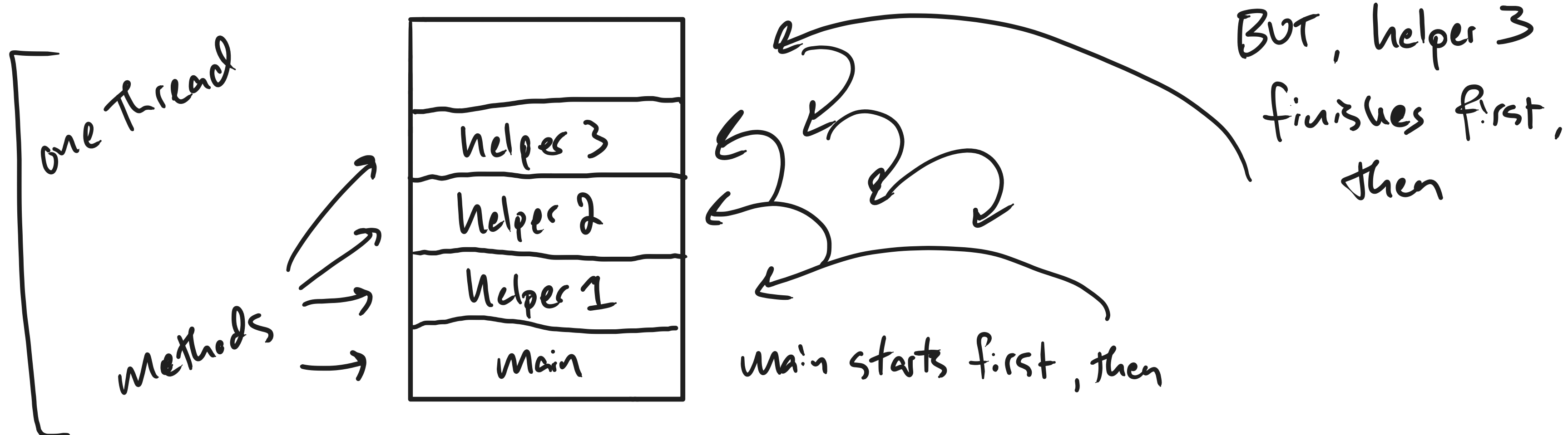
PRIMITIVE VALUES  
REFERENCE VARIABLES  
↳ to primitives  
↳ to objects

### HEAP

ALL Objects  
All properties / contents of objects  
The String pool of literals  
ANYTHING shared by Threads

## HOW DOES A STACK WORK?

- LIFO → last in, first out



## HOW DOES A HEAP WORK?

Starts when the program starts  
lives until ALL Threads complete  
then stops

