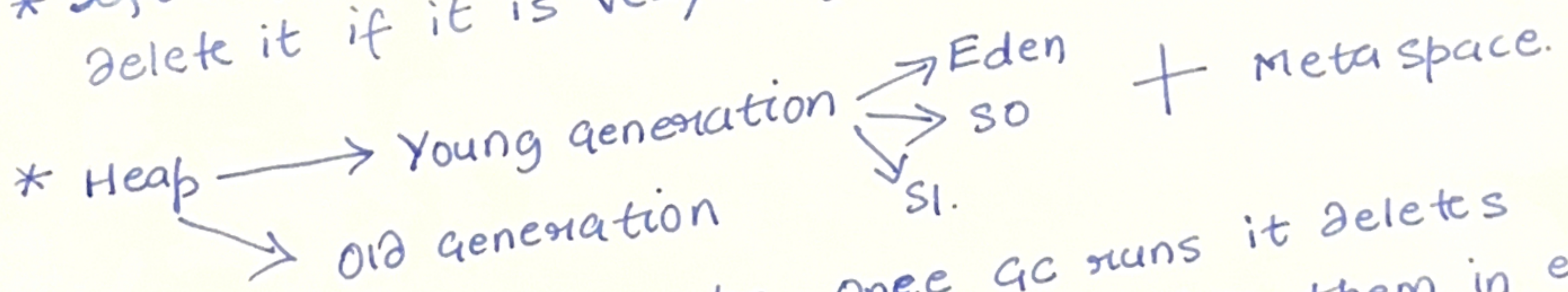
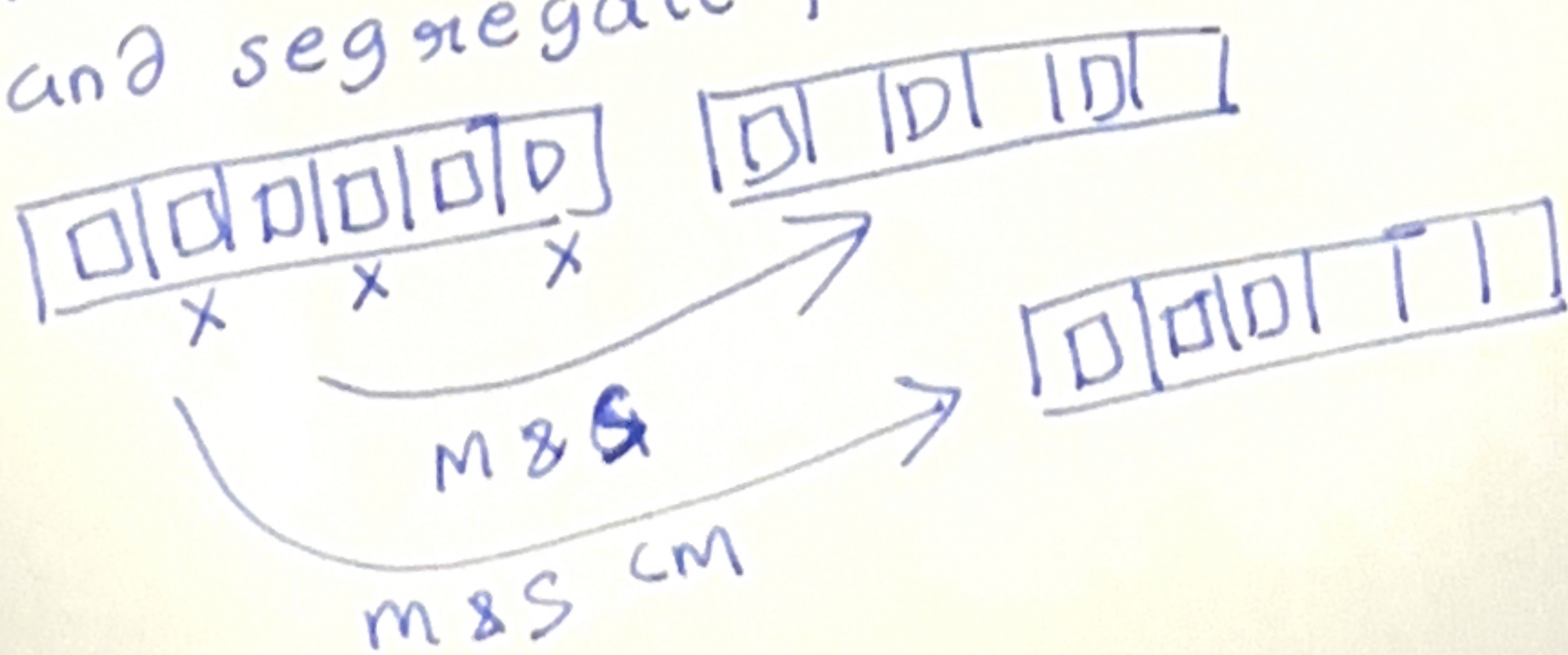


- \* Each thread has its own stack memory.
- \* Once last bracket is reached ~~all~~ all the references are deleted but heap memory is not deleted. That when garbage collector comes into play.
- \* Strong reference  $\Rightarrow$  Object obj = new Object().  
GC will not delete this object from ~~the~~ ~~the~~ until the reference is deleted.
- \* Weak Reference  $\Rightarrow$  WeakReference <Object> wr = new WeakReference <Object> (new Object()).  
Will survive only till garbage collector doesn't runs.  
Once GC runs, this will get deleted from the heap.
- \* Soft Reference  $\hat{=}$  Kind of weak Reference, but GC will only delete it if it is very urgent.



Eden stores new objects. Once GC runs it deletes object from Eden, SO/S1 and places ~~then~~ them in either SO or S1. It also adds to their ages. ~~or~~ Once some threshold age is reached the survivors are promoted to old generation section.  
GC use Mark & Sweep algo.  
Meta space ~~is~~ has constants, class variables (static)

- \* GC Algos  $\Rightarrow$  Mark and Sweep (above)  
Mark and Sweep with compact memory.  $\rightarrow$  Mark object and segregate free up space and ~~the~~ occupied space





\* GC versions:-

- ) Serial GC  $\Rightarrow$  only one thread runs to delete object
- ) Parallel GC  $\Rightarrow$  multiple threads runs to delete objs.
- ) Concurrent GC  $\Rightarrow$  GC runs without pausing application threads.

•) G1 GC  $\Rightarrow$  concurrent GC + compact memory.

\* ) When GC runs application threads are paused.