

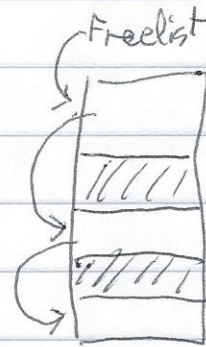
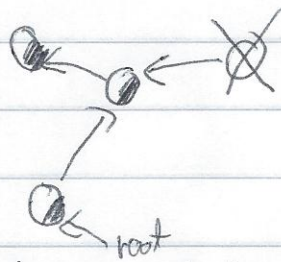
5 Garbage collection

Mark & Sweep

Root set

- Stack
- env - lex, ...

∴ Can become fragmented



Compaction
can be used.
∴ alter pointers

∴ need to stop mutator

Tricolor

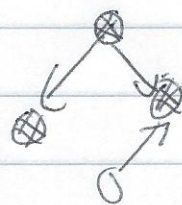
Sert, grå og hvid. Set for each color.

Color roots grey

Pick grey node, color children grey, color node black.

When no grey left, collect white nodes.

+ can be implemented incrementally with write-barrier.



write-barrier:

writing black object and linking
to white \Rightarrow color object grey

Stop and copy

+ auto compaction

From space

To space

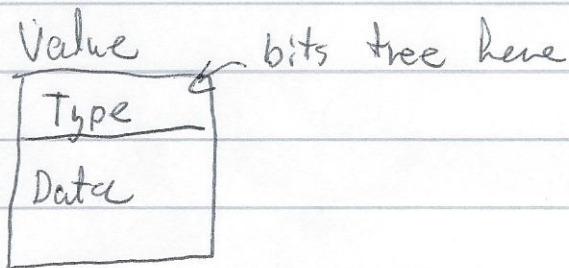
∴ need to fix pointer references

∴ need stack/object description

Daimi scheme

Divide heap into

- Values. Fixed size \rightarrow Mark & sweep them. ^{use bit in} type to mark
- Data. Variable size. Live if one value points to it and is live. \rightarrow Use stop & copy.



Maybe box data to use mark & sweep with compaction. We need

- is it live
- Length
- Owner

We can then sequentially compact memory.

