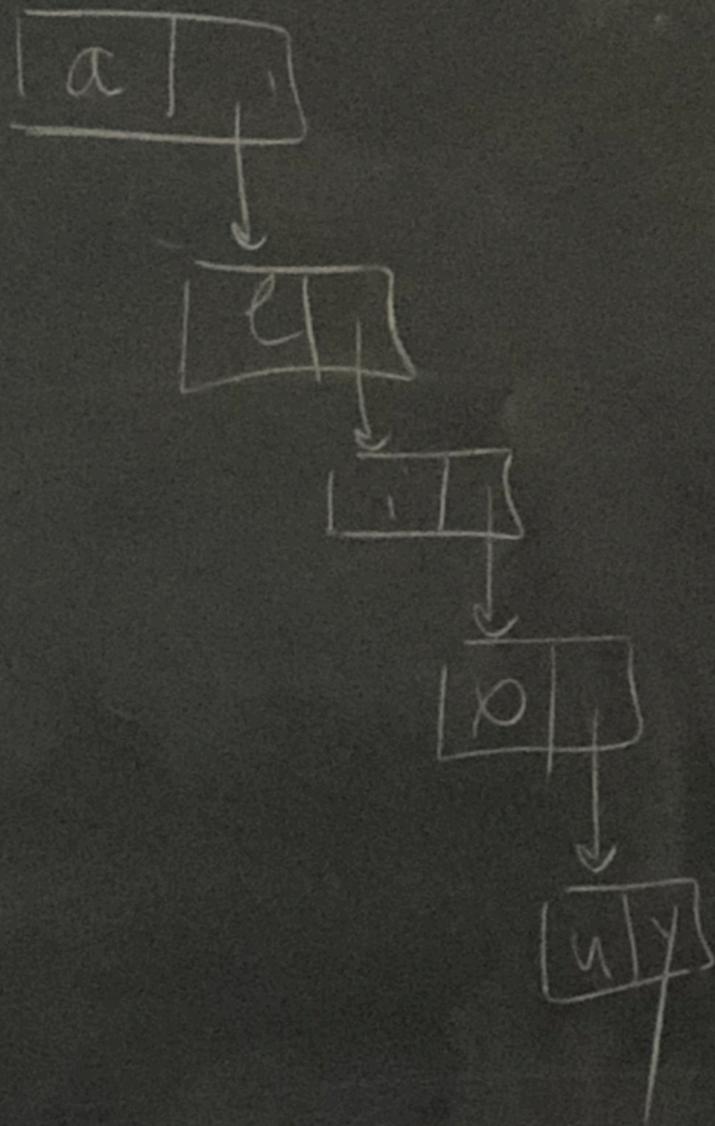


131 Project 5 Notes

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use car and cdr for 131

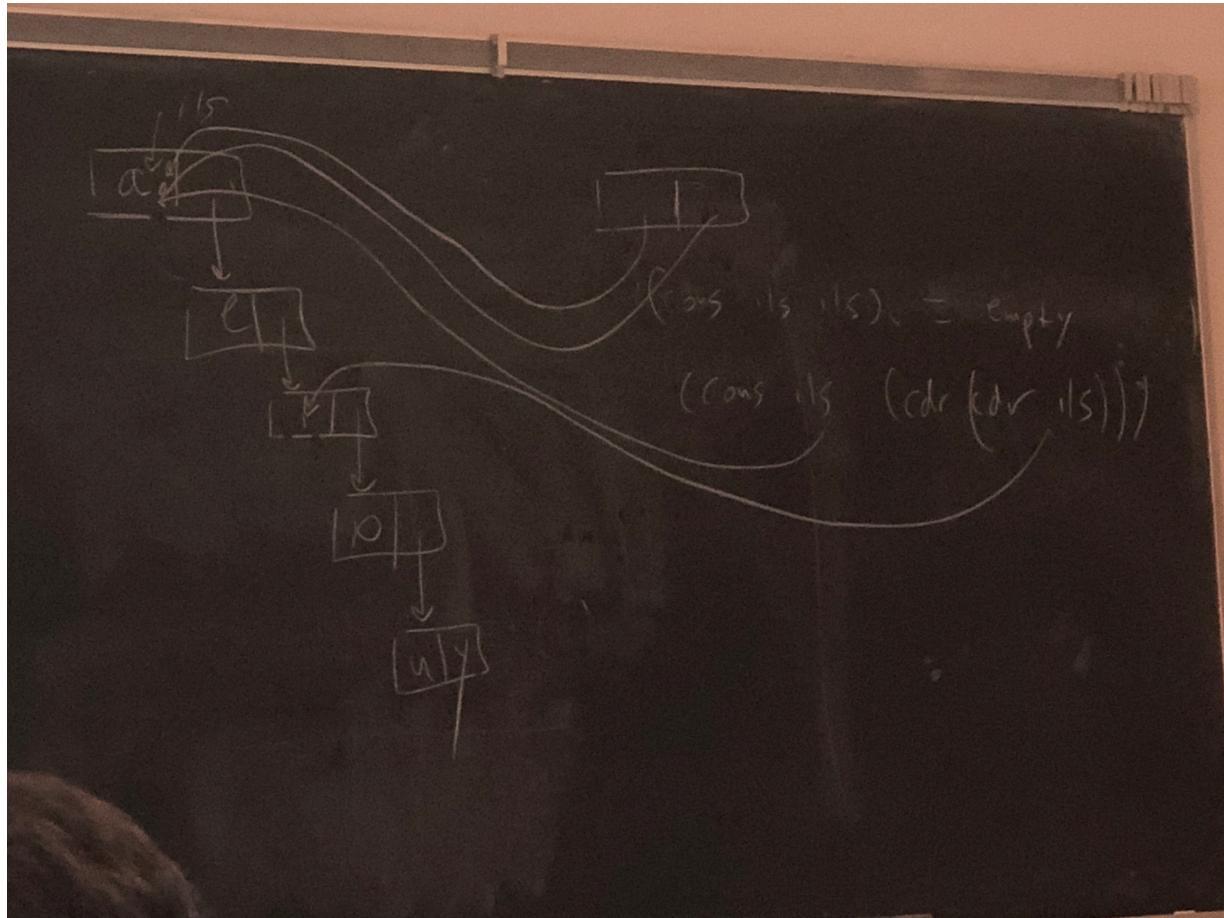
listdiff is basically a cons



listdiff is just to check the diff between the pointers
if it's the same guy the thing is empty

but looking at the next example

(cons ils (cdr (cdr ils)))



now when we have $(\text{cons } (\text{cdr } \text{ils}) \text{ 'y})$, we point 'y to the last y, we point the other cons cdr ils to [e, ...]

cons is a place to save data

- saves a pointer, saves a pointer

cons is 2 pointers that is saved in cons, which is the top right in this pic

cons is NOT what we had earlier in the slides (????)

cons is defined already

$(\text{cons } '() \text{ ils})$ cannot change '()' to the second pointer

function listdiff is giving the differences of the elements in the pointers: if we have stuff in first pointer that the second pointer doesn't have, then we return that bullshit

is there a way to iterate from the first pointer to the second pointer using cdr?

NOTE:

```
'(lambda (x) (* x x))           // freezes this function in time  
(eval '(lambda (x) (* x x)))    // will evaluate the frozen function
```

First check if it is cons

Then check if cons contains 2 pointers

Then check if can cdr first cons into second cons

- null-ld?
- ld?
- cons-ld
- car-ld
- cdr-ld
- ld
- length-ld
- append-ld ???????
- ld-tail
- list->ld
- ld->list
- map-ld
- expr2ld