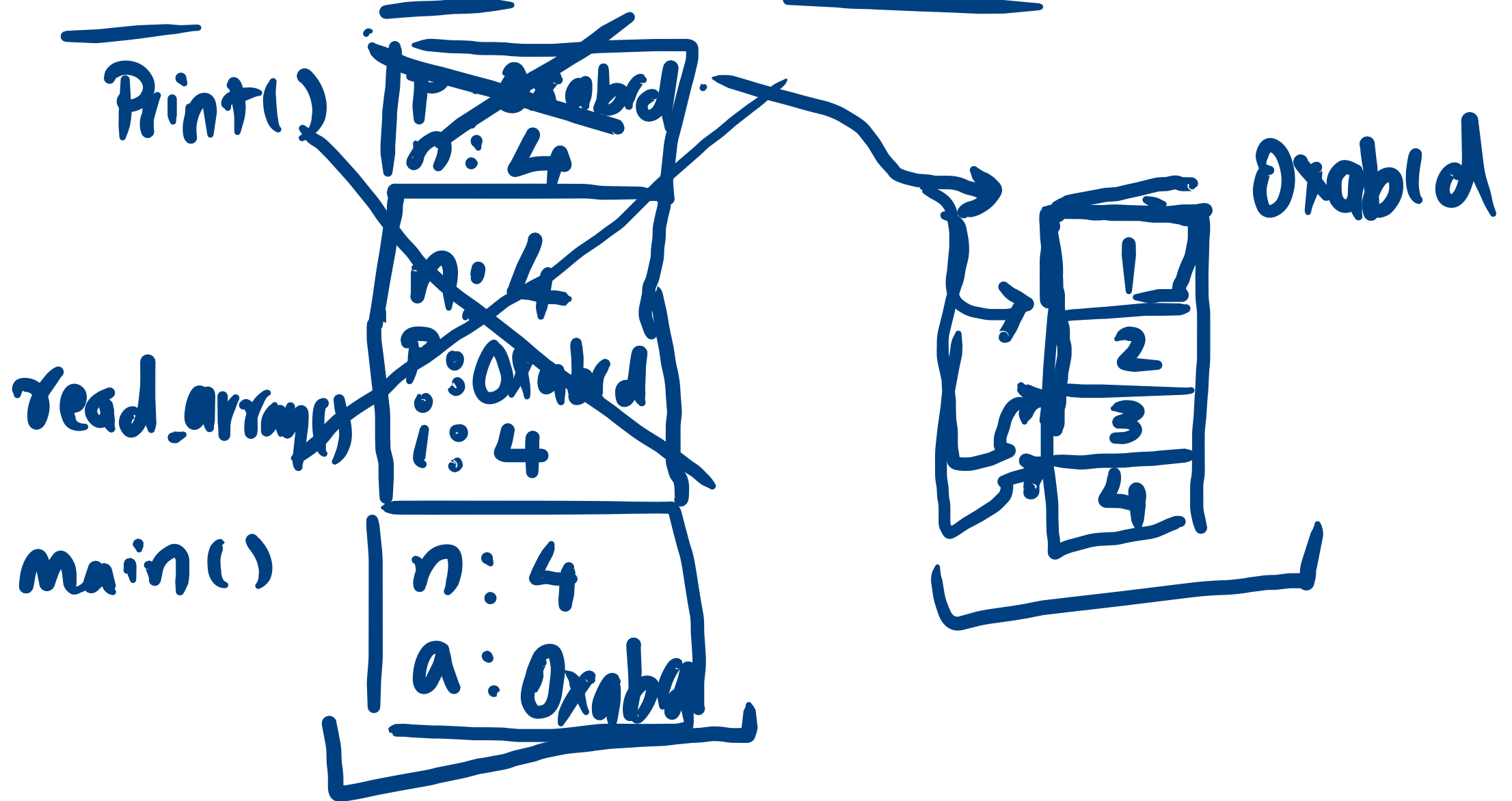
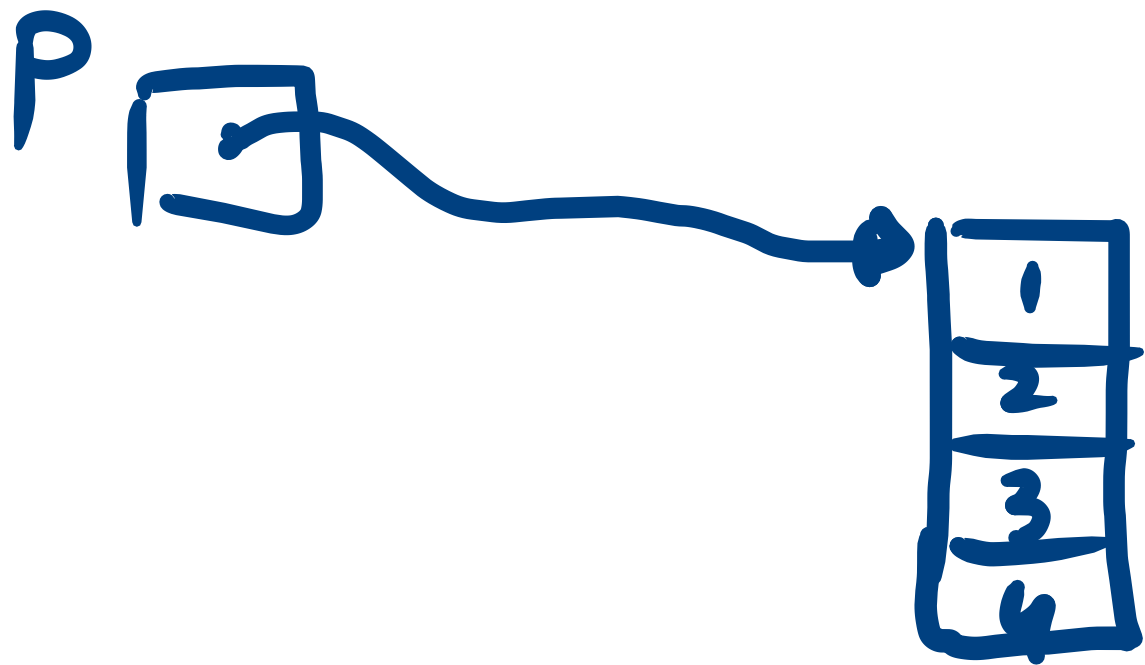
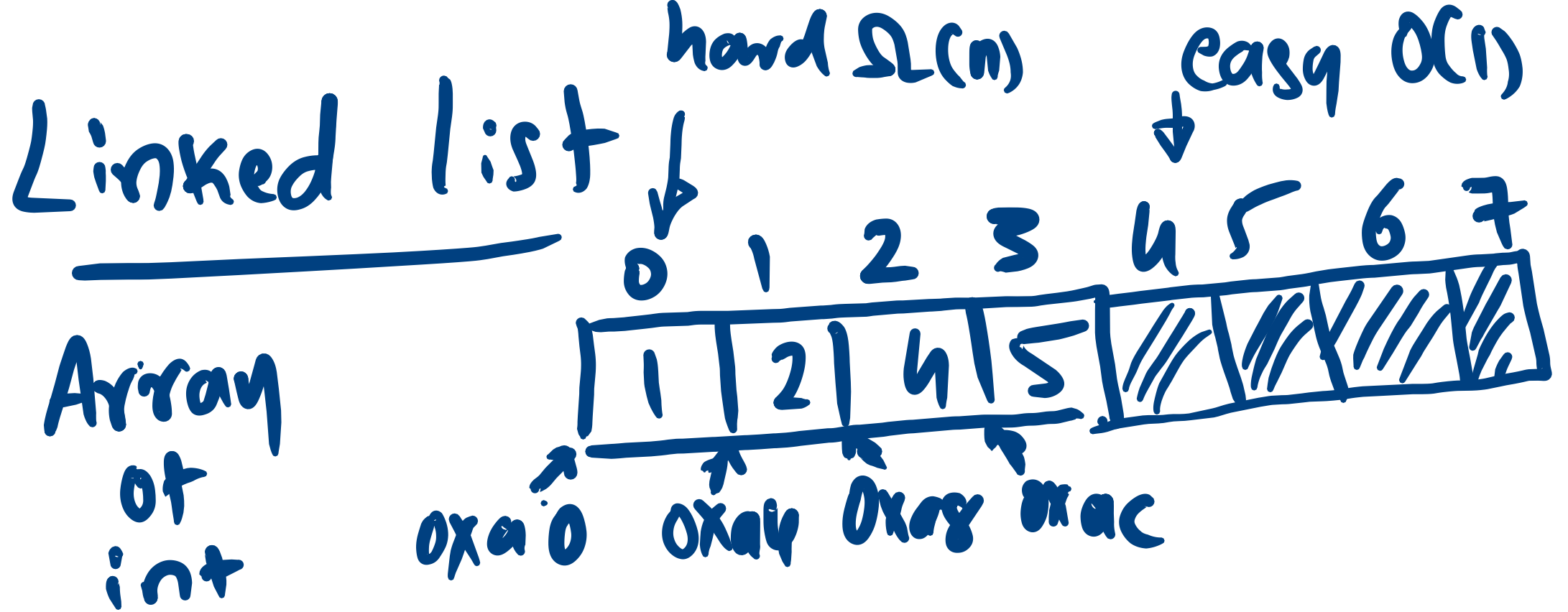


# Dynamic Memory allocation





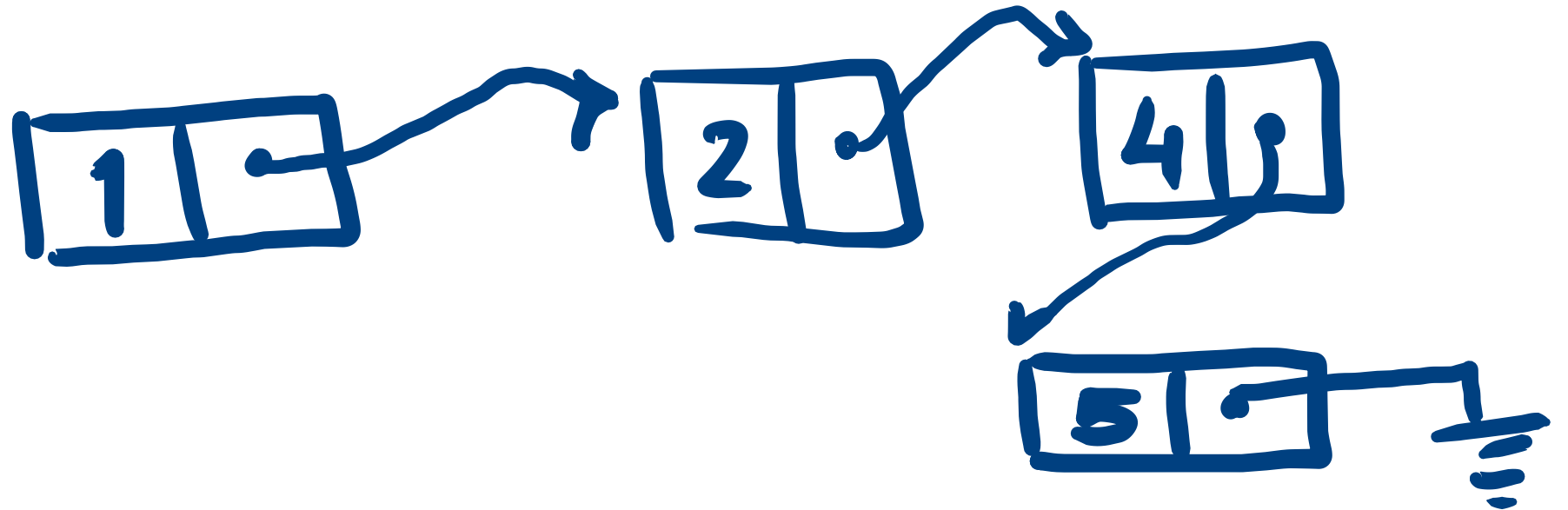


Goal: Insert 3 after 2.

copy  $a[3]$  to  $a[4]$   
copy  $a[2]$  to  $a[3]$   
write 3 to  $a[2]$

# Singly linked list

Each elt. Stores the value at the position and address of the next elt



0x00



0x34



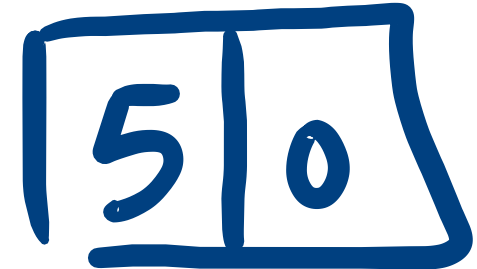
0x5a



0x11



0x22



Drawback: Extra storage  
for Pointers.

# Linked list Insertion

i/p: address of Previous cell  
value to insert

o/p: list with value inserted

time:  $O(1)$