

# **comp1511 week 08**

# admin

- **assignment 1** marking is underway!
- **assignment 2** has been released:

<https://www.youtube.com/live/G5ObXA6tvE>

# agenda for today

- malloc revision
- diagramming linked lists
- inserting into linked lists

# **malloc revision**

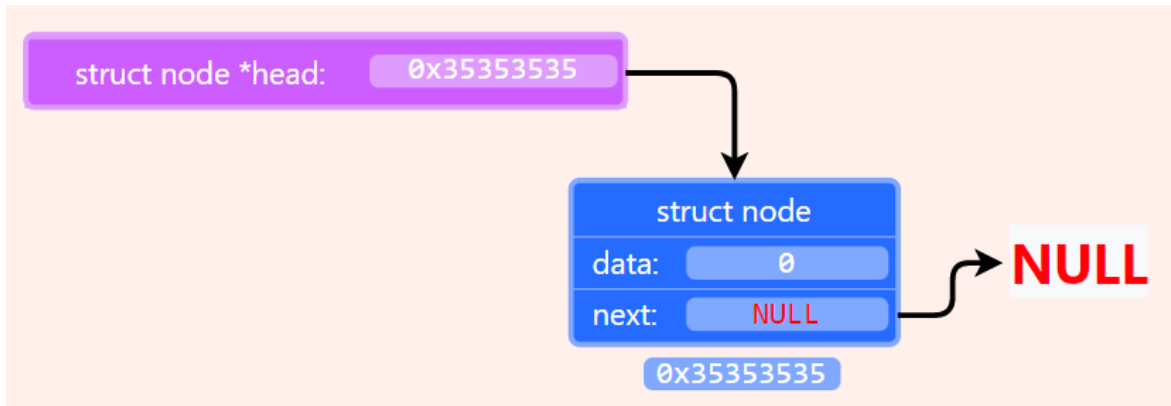
what does malloc do?

what are the inputs?

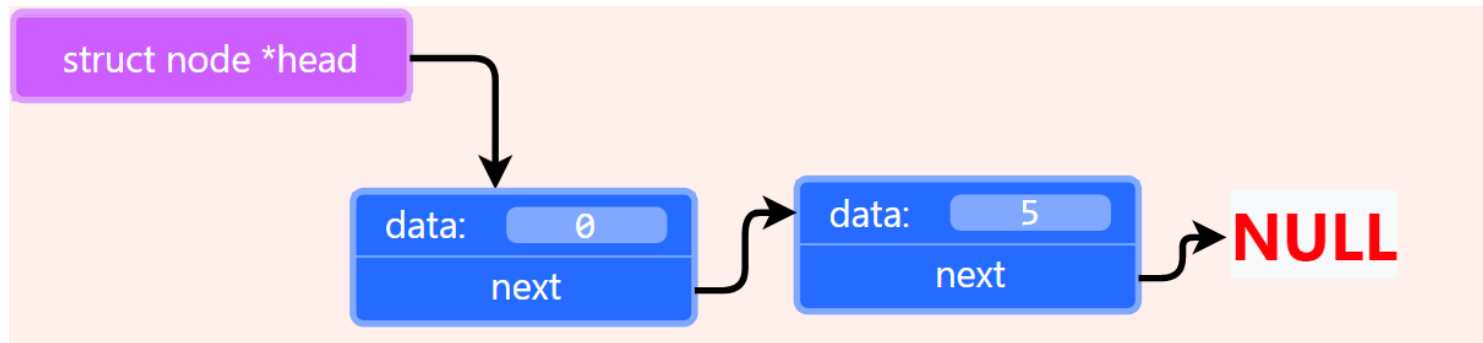
what are the outputs?

**demo time!**

# linked lists



# adding nodes to linked lists

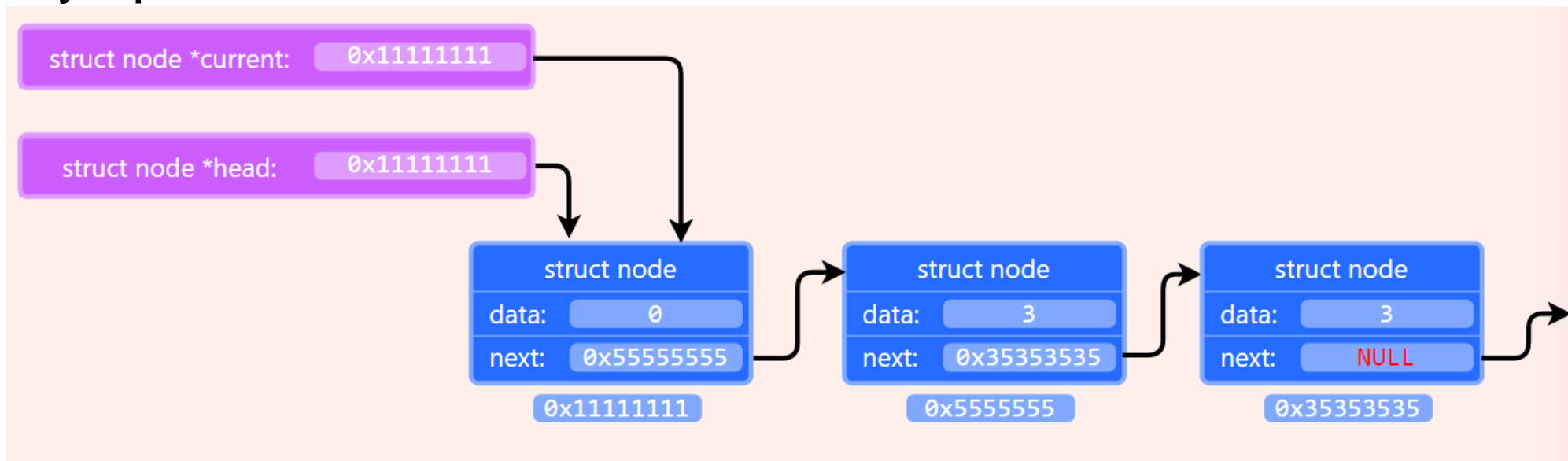


# iterating through a linked list?

how do we iterate through a linked list?

how do we stop one before the end of the linked list?

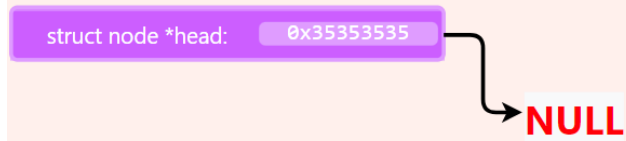
any special cases to consider?



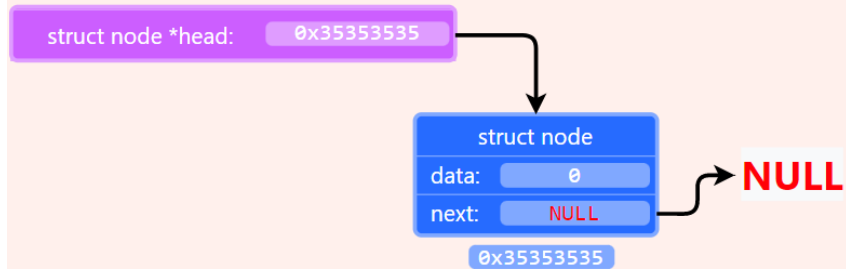


# cases to consider

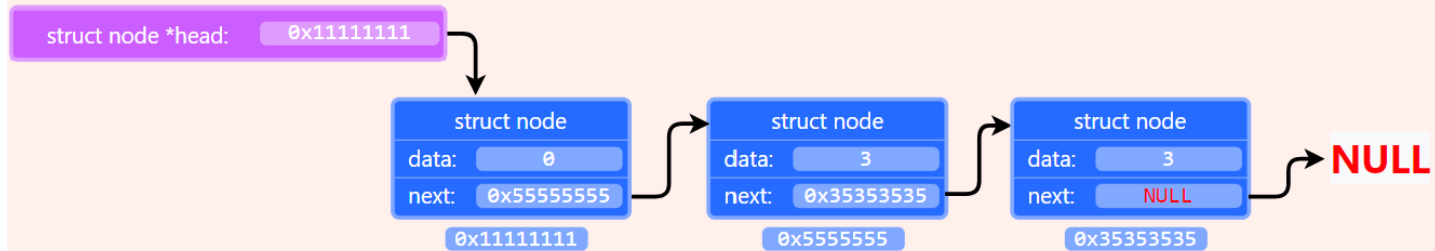
1. An empty list:



2. A list of length 1:



3. A longer list:



# inserting into a linked list

given a linked list, how can we write a function to:

1. adding to the head of a list
2. adding to the end of a list
3. adding in the middle of a list

**any questions?**