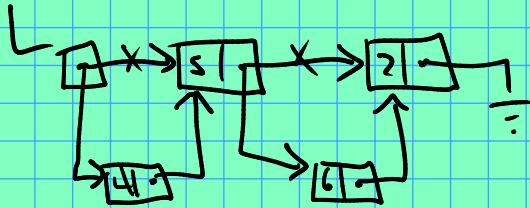


Exercise: read stdin (say integers)
into a sorted linked list.

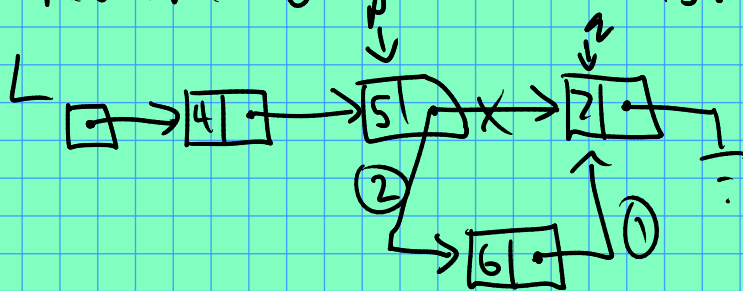
Say input was 5 4 7 6



Special cases: - beginning of list
- end of list? (maybe not?)

"Generic" case: new value in middle of list.

New value: 6. List contents:



node * n = new node;

n->data = x;

n->next = r; // ①

p->next = n; // ②

How to find p, q? Say new value
stored in variable x.

node * q = L; // looks for first value w/ q->data ≥ x

node * p = NULL; // p right before q.

while ($q \neq \text{NULL} \ \&\& \ q \rightarrow \text{data} < x$) {

// advance q, p

$p = q;$

$q = q \rightarrow \text{next};$

Note: this will not
seg-fault thanks to
short-circuit evaluation.

}

$q \rightarrow \text{data} \equiv \ast(q + \text{c_data})$

