

(a)

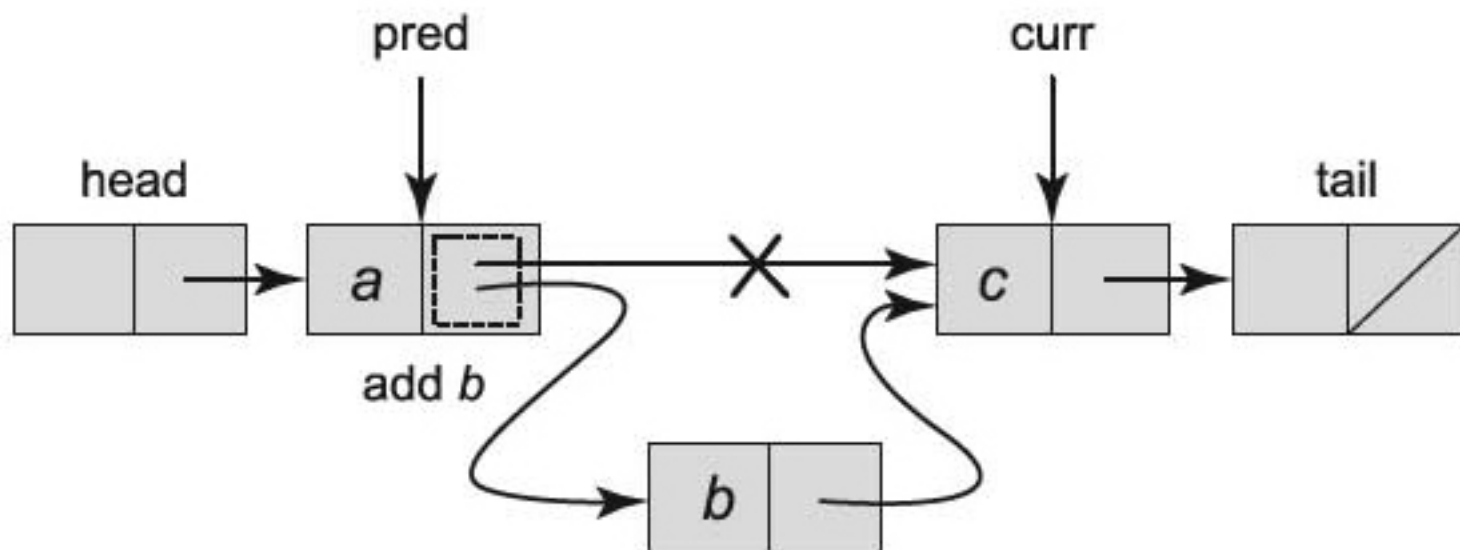


FIGURE 9.3A A sequential `Set<>` implementation: adding and removing nodes. In part (a), a thread adding a node *b* uses two variables: *curr* is the current node, and *pred* is its predecessor. The thread moves down the list comparing the keys for *curr* and *b*. If a match is found, the item is already present, so it returns *false*. If *curr* reaches a node with a higher key, the item is not in the set, so it sets *b*'s next field to *curr*, and *pred*'s next field to *b*. In part (b), to delete *curr*, the thread sets *prgde*'s next field to *curr*'s next field.