

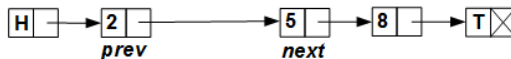
Теория и практика многопоточного программирования

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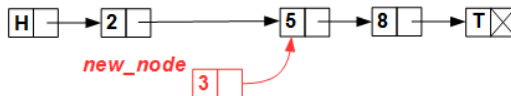
Московский физико-технический институт (национальный исследовательский университет)
Кафедра теоретической и прикладной информатики

Москва 2020

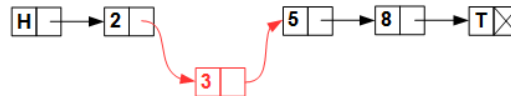
1. find insert position for key 3



2. `new_node.next_store(next)`



3. `prev->next_CAS(next, new_node)`



1. find key 3

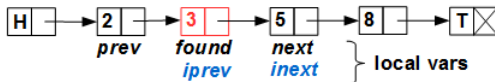


2. prev->next_.CAS(found, next)



A: find key 3

B: find insert pos for key 4

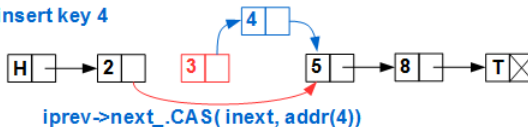


A: erase key 3

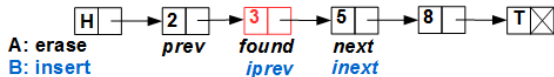


`prev->next_.CAS(found, next)`

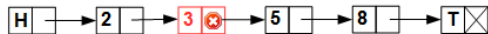
B: insert key 4



`iprev->next_.CAS(inext, addr(4))`



A: Logical deletion - mark item *found*

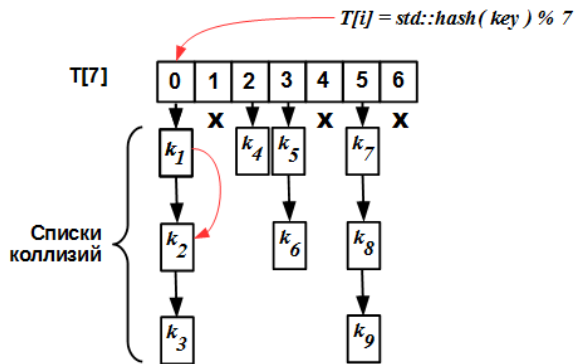


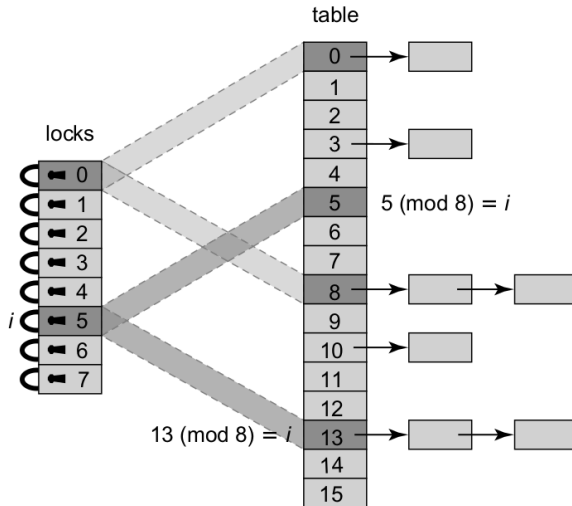
`found->next_CAS(next, next | 1)`
B: `iprev->next_CAS(inext, new_item)` - failed!!!

A: Physical deletion - remove item *found*

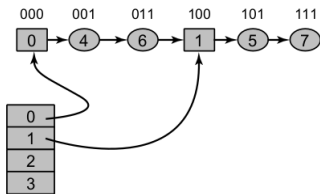


`prev->next_CAS(found, next)`





(a)



(b)

