

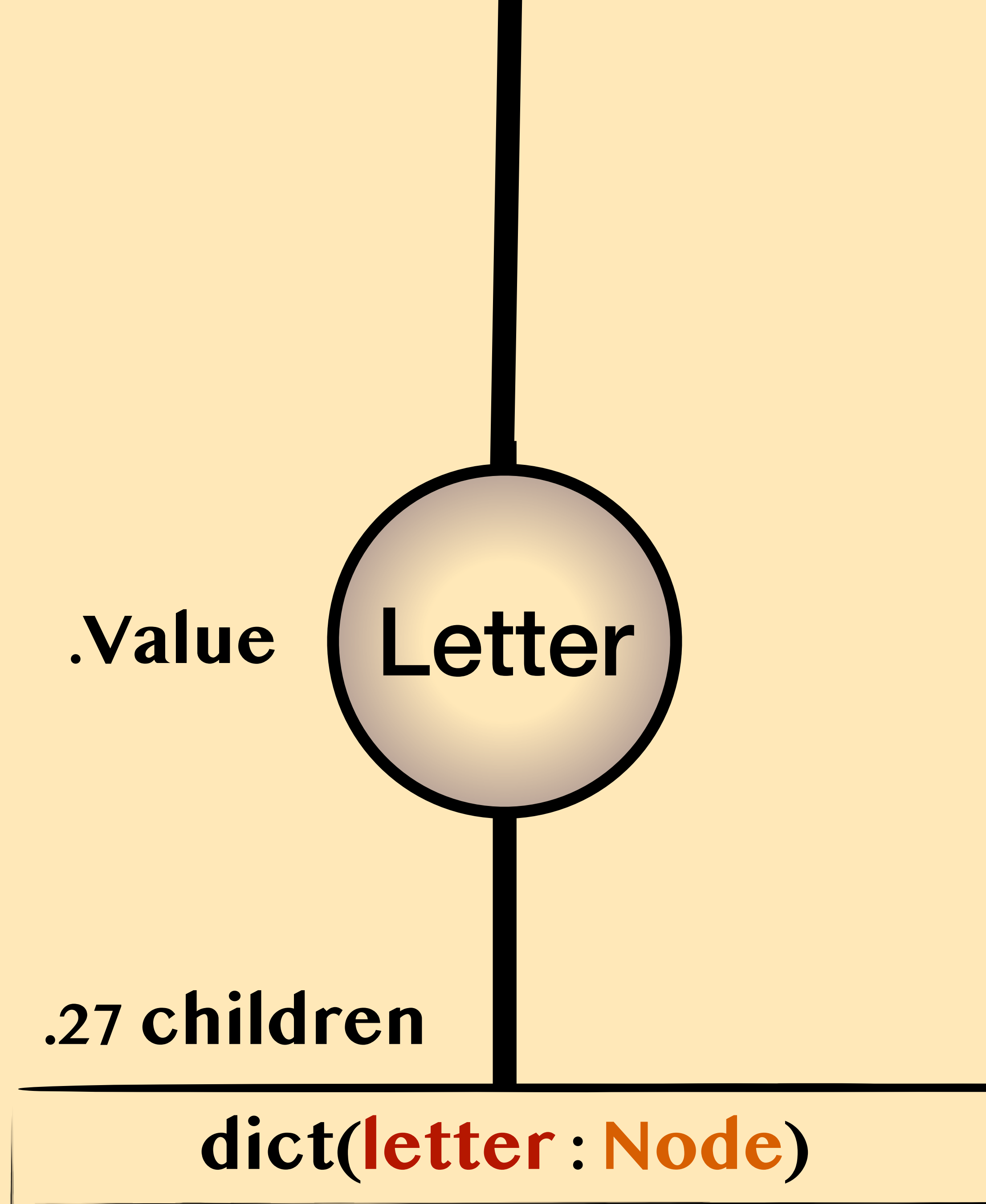
Trie. Red-Black Tree.

Seminar 6.

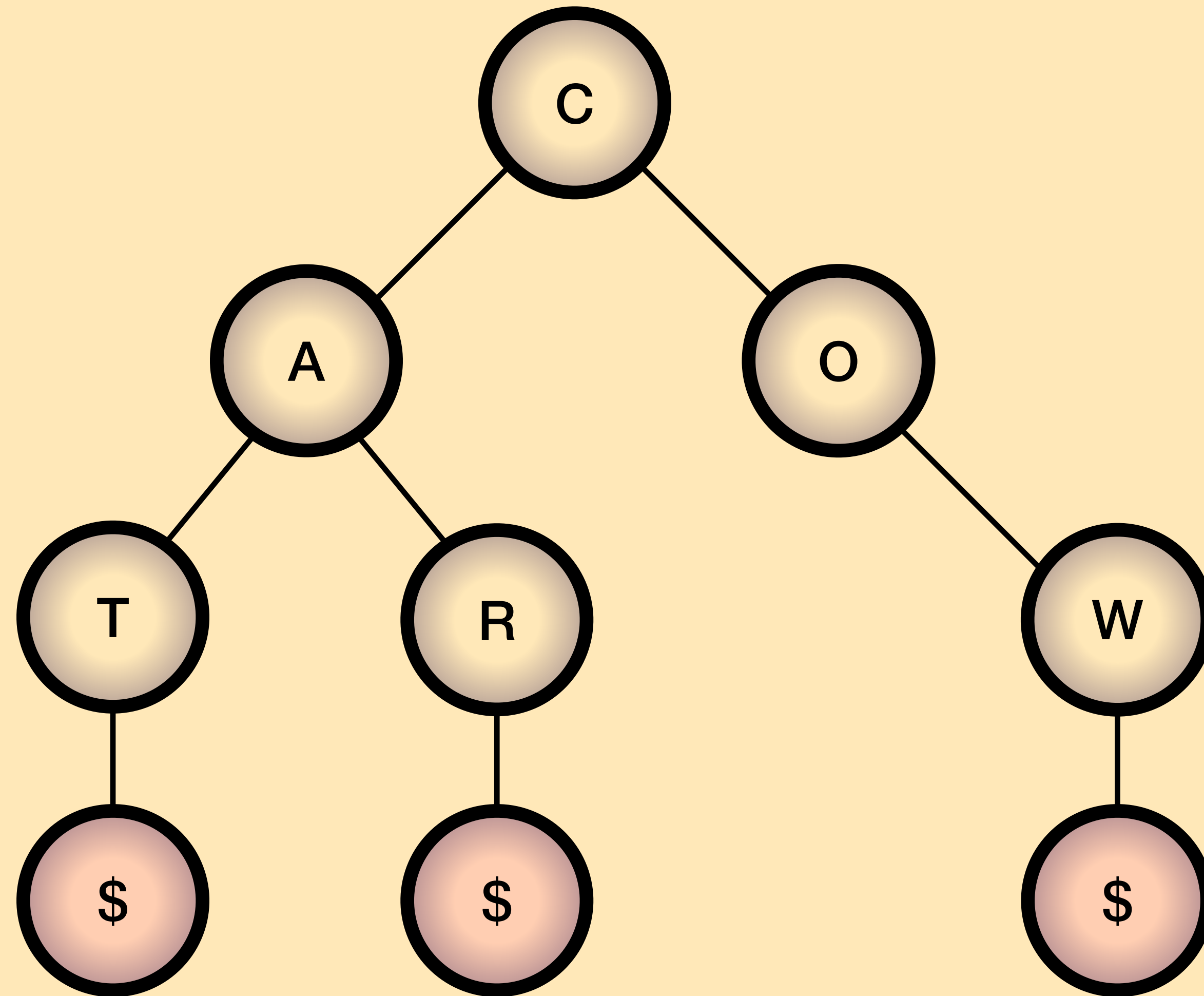
Plan for the day

	Seminar 1	Seminar 2
All together	<div>1. Revise Trie</div> <div>2. Implement Compact trie</div>	<div>1. Implement Compact trie</div>
Pro level	<div>1. Implement Red-Black tree</div>	

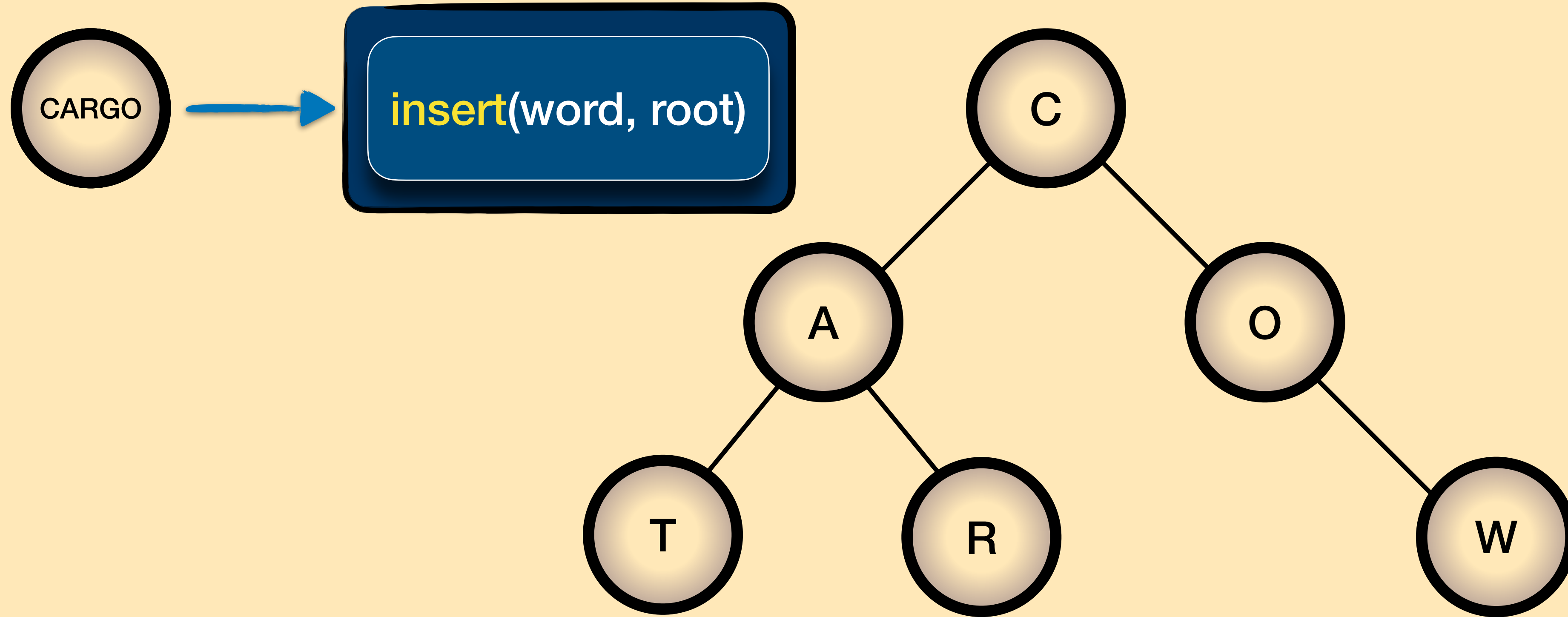
Trie node



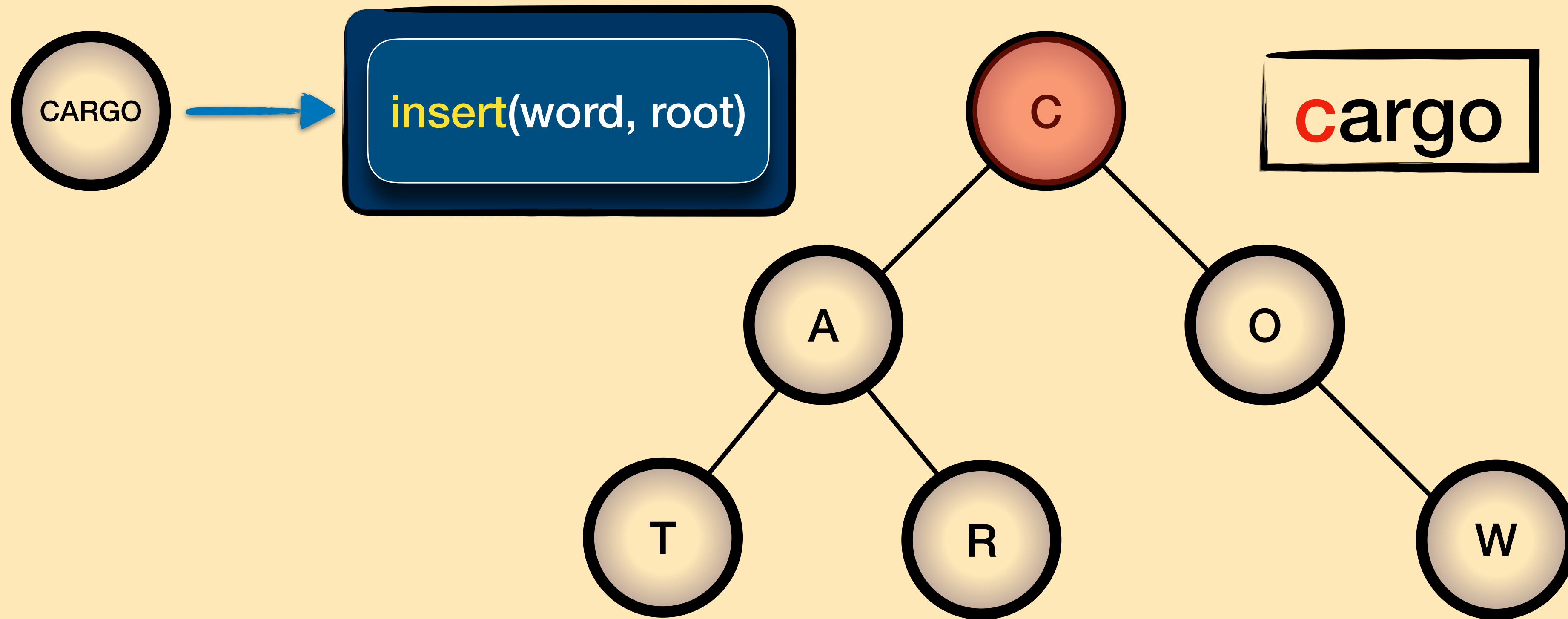
Trie



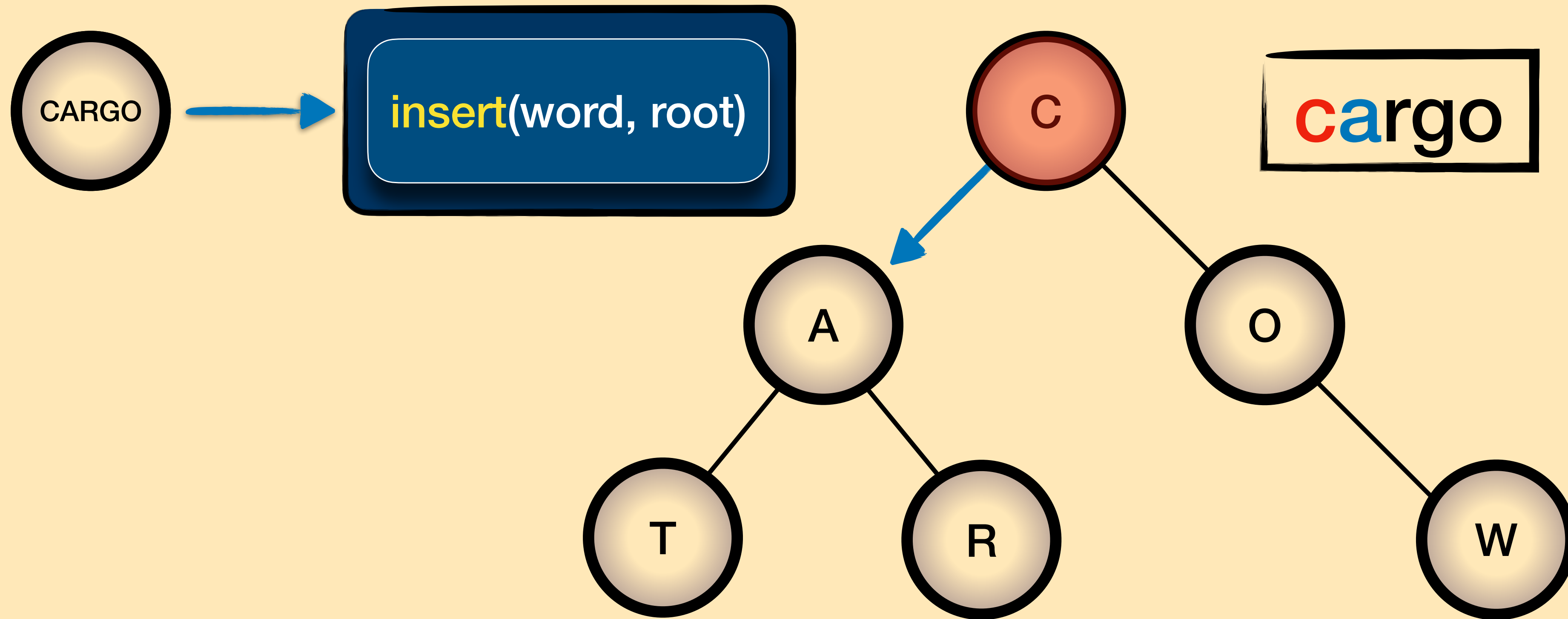
Trie



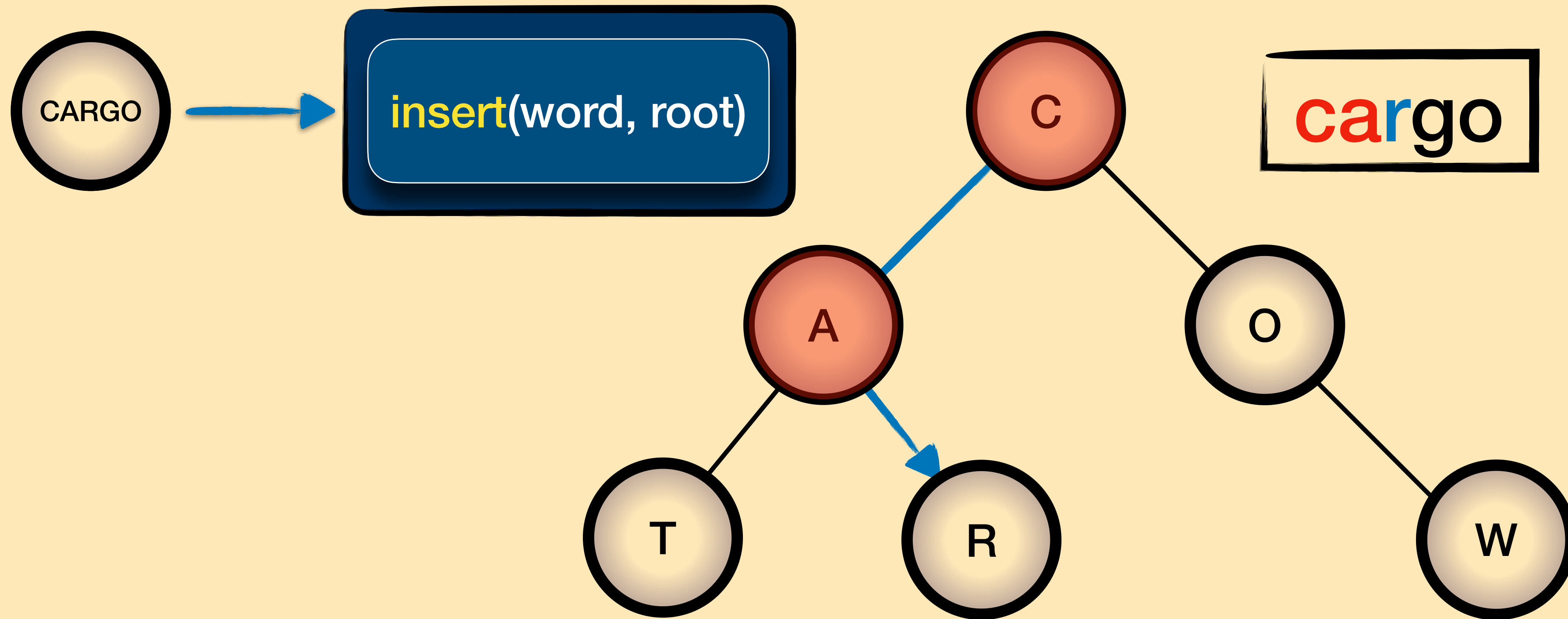
Trie



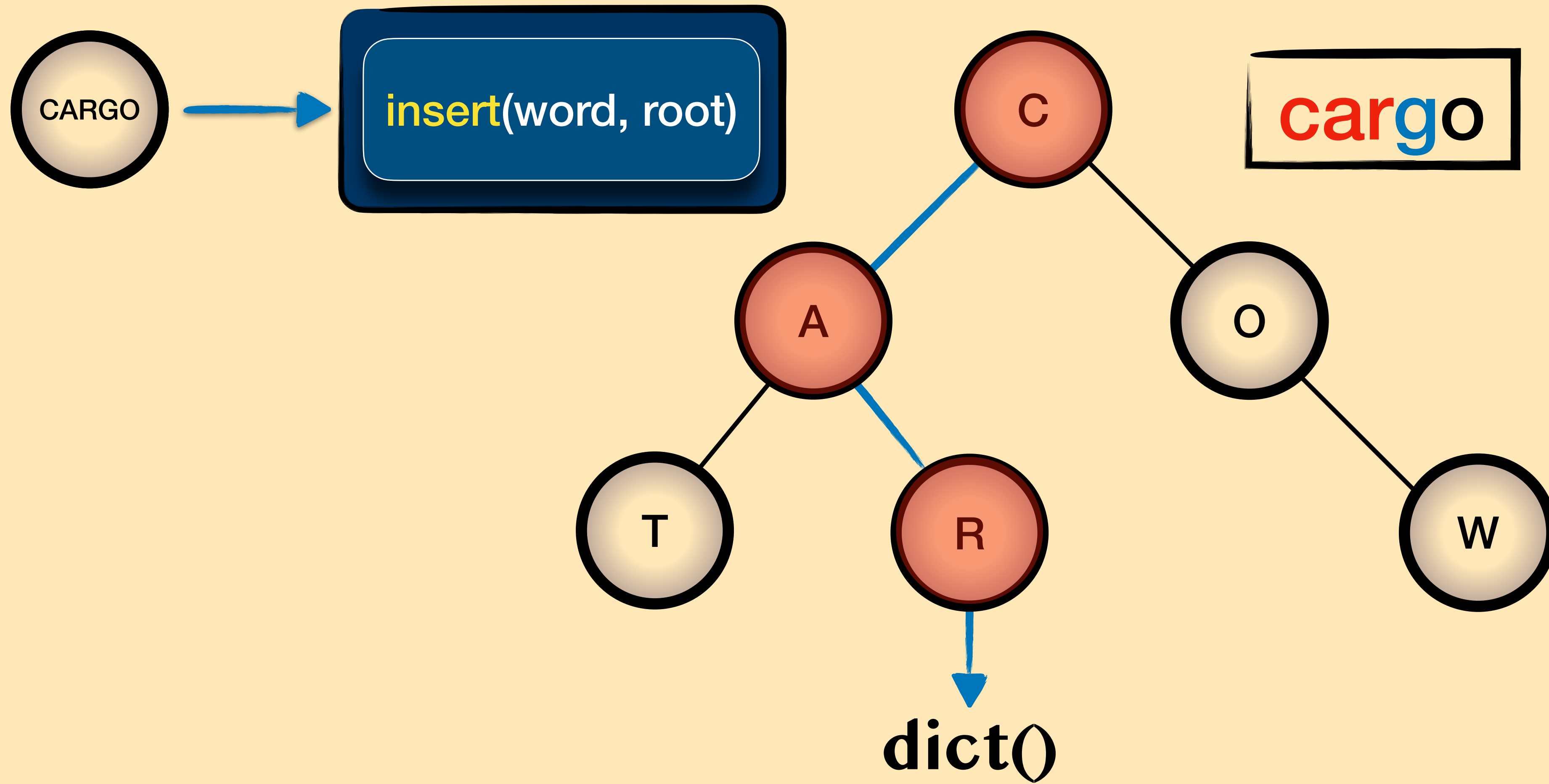
Trie



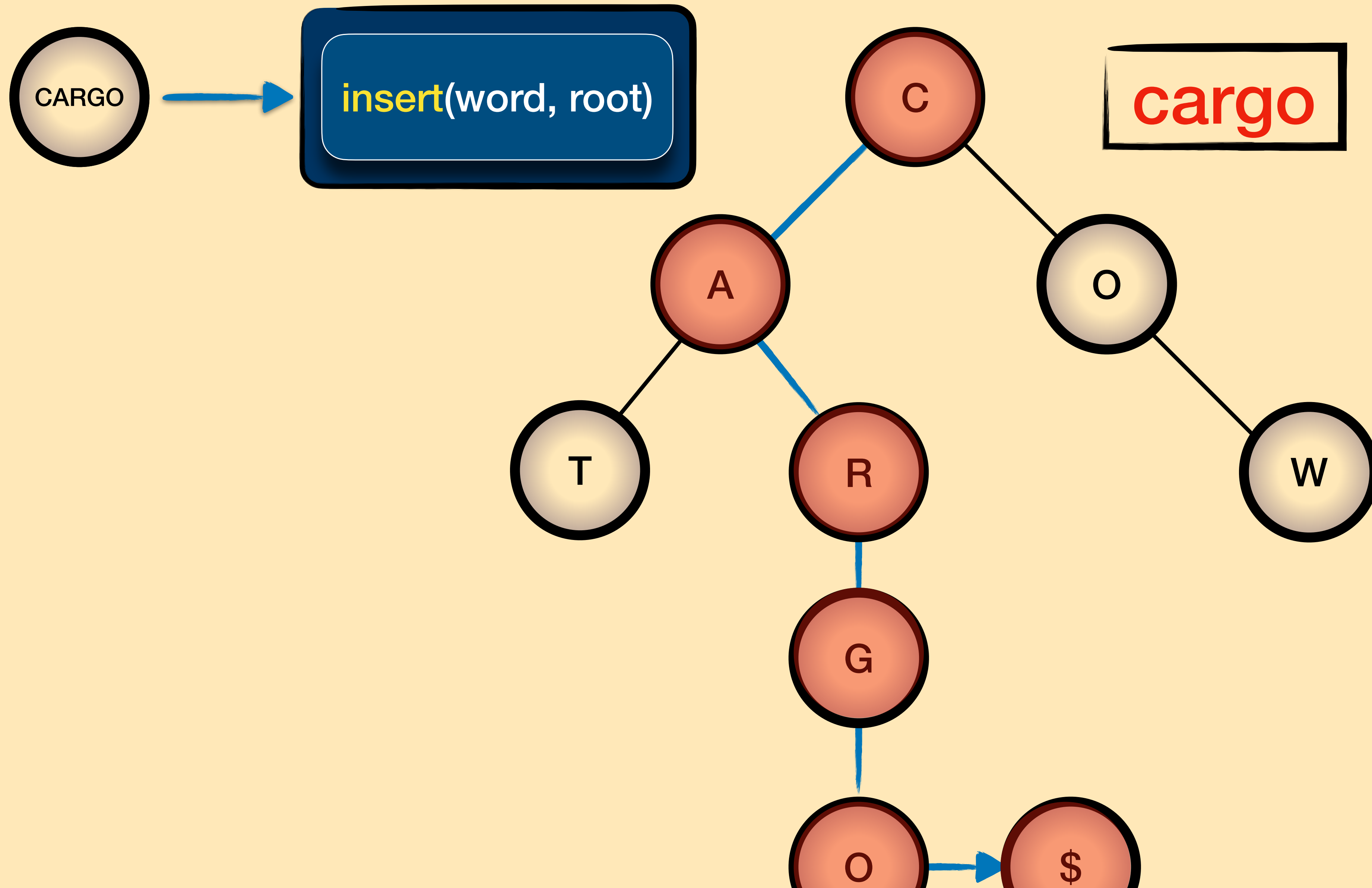
Trie



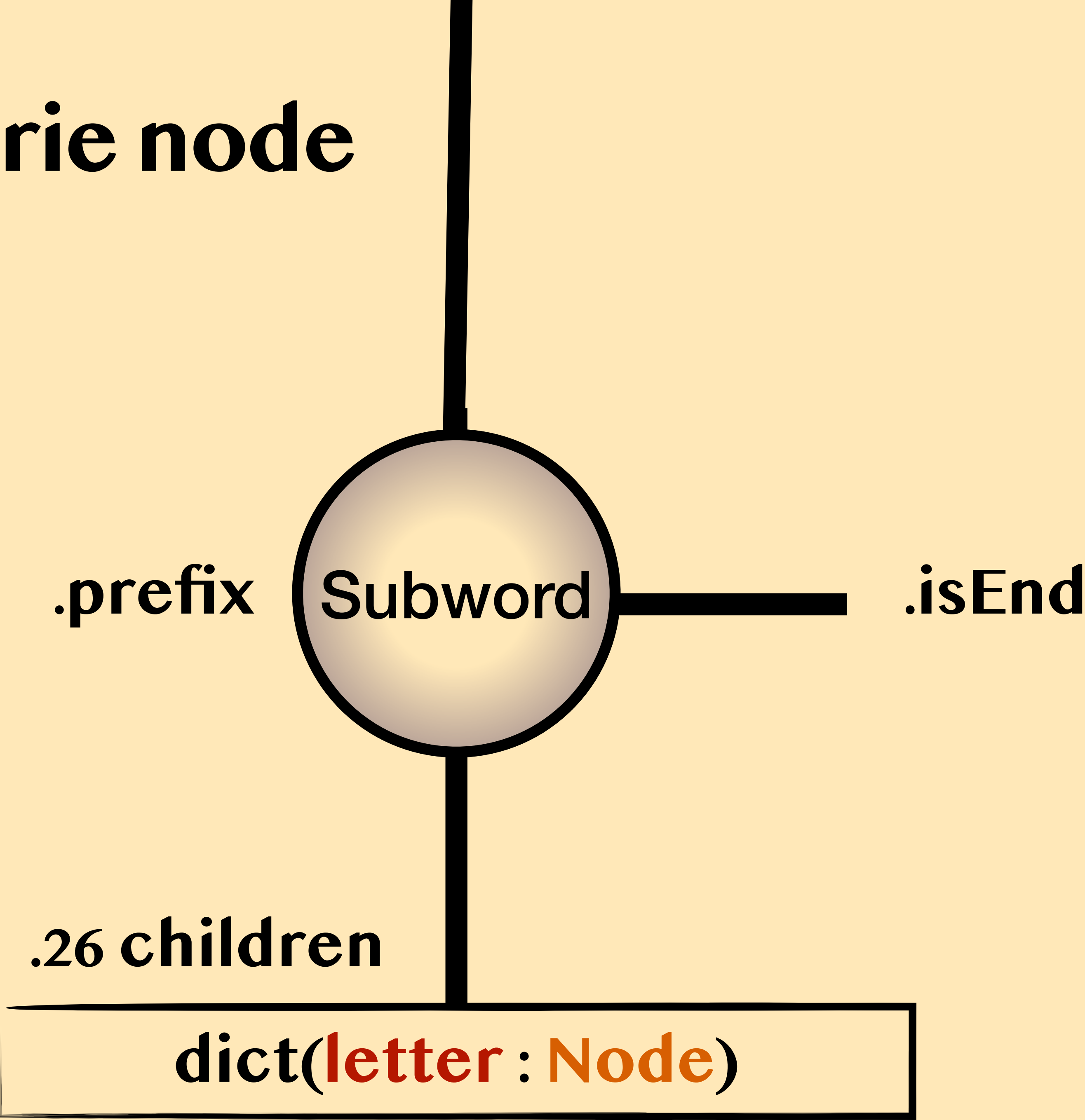
Trie



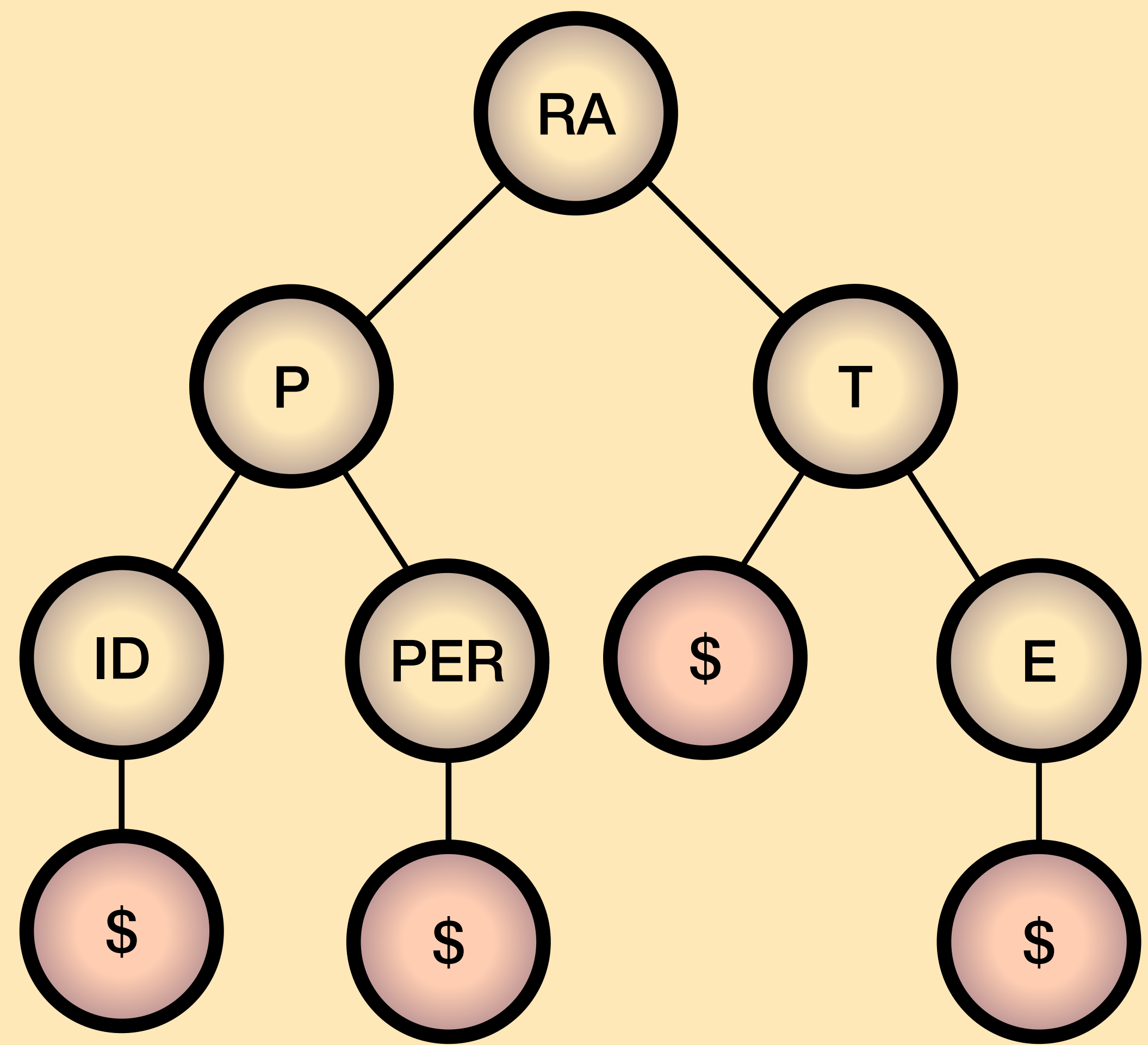
Trie



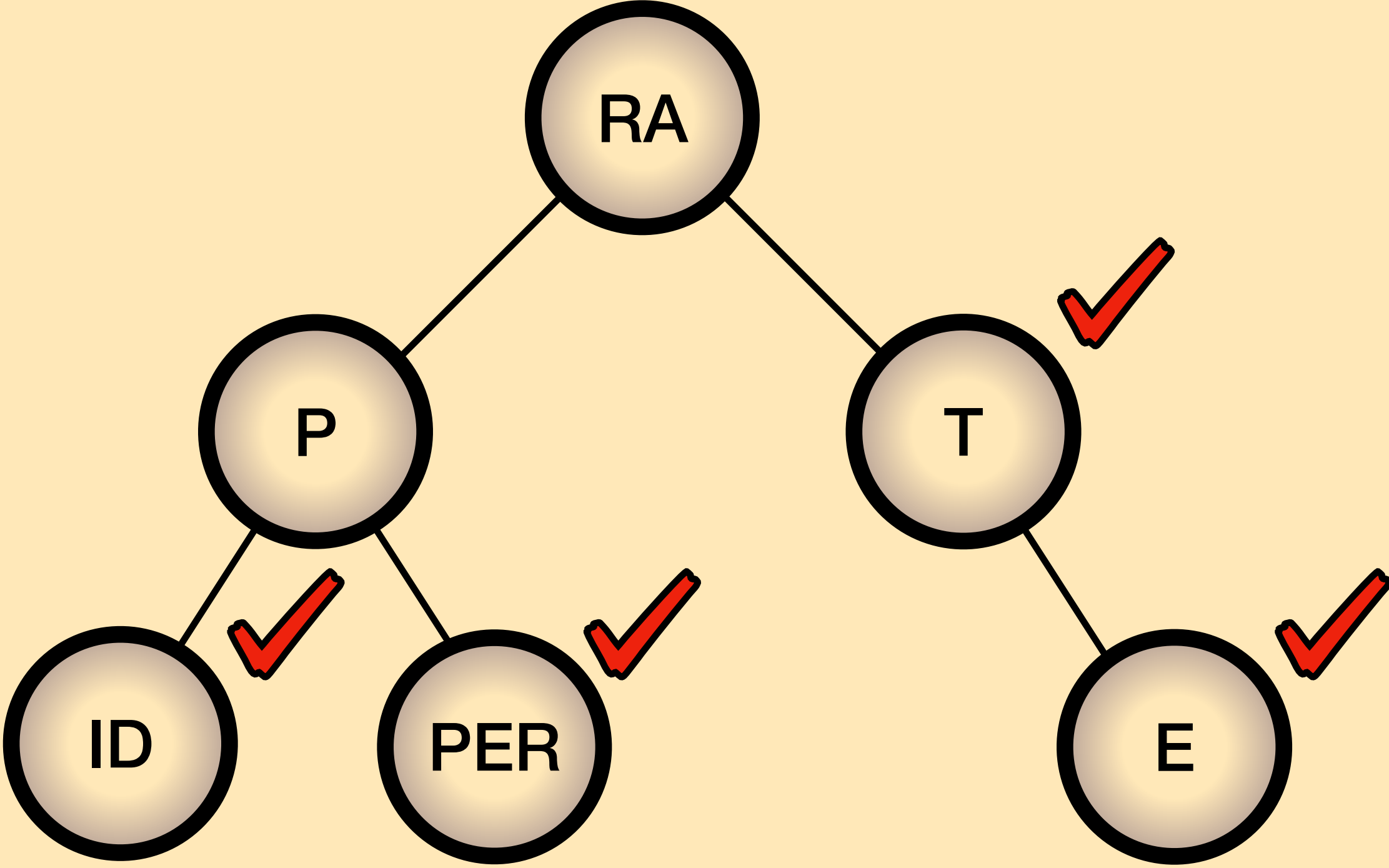
Compact Trie node



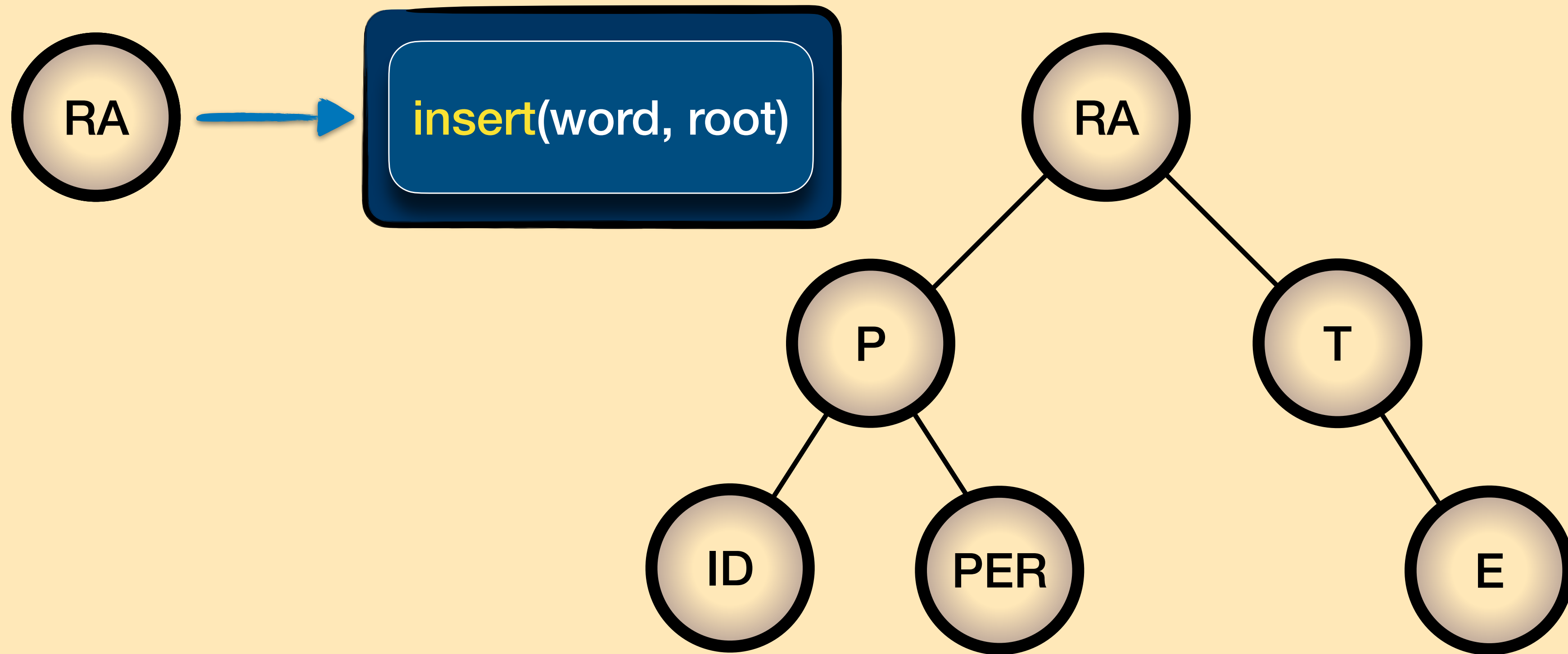
Compact Trie



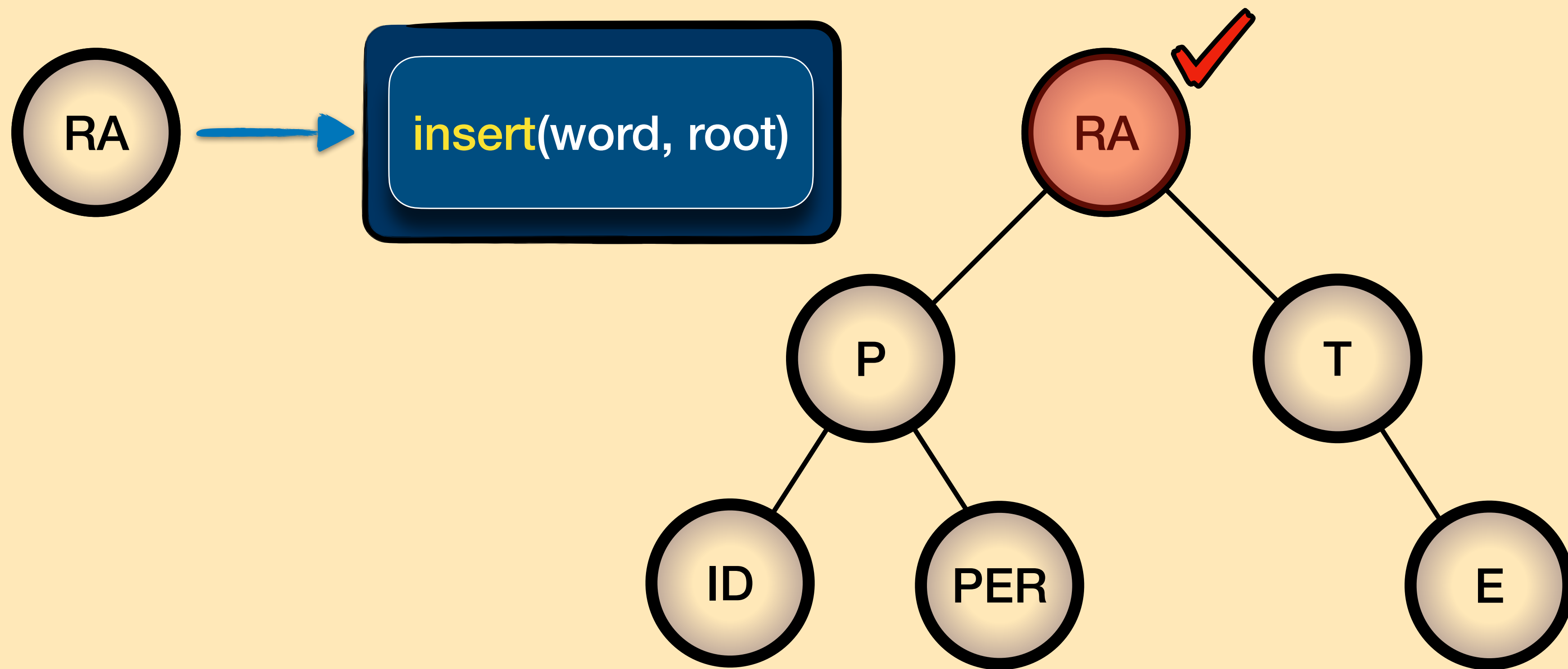
Compact Trie



Compact Trie: **case I**

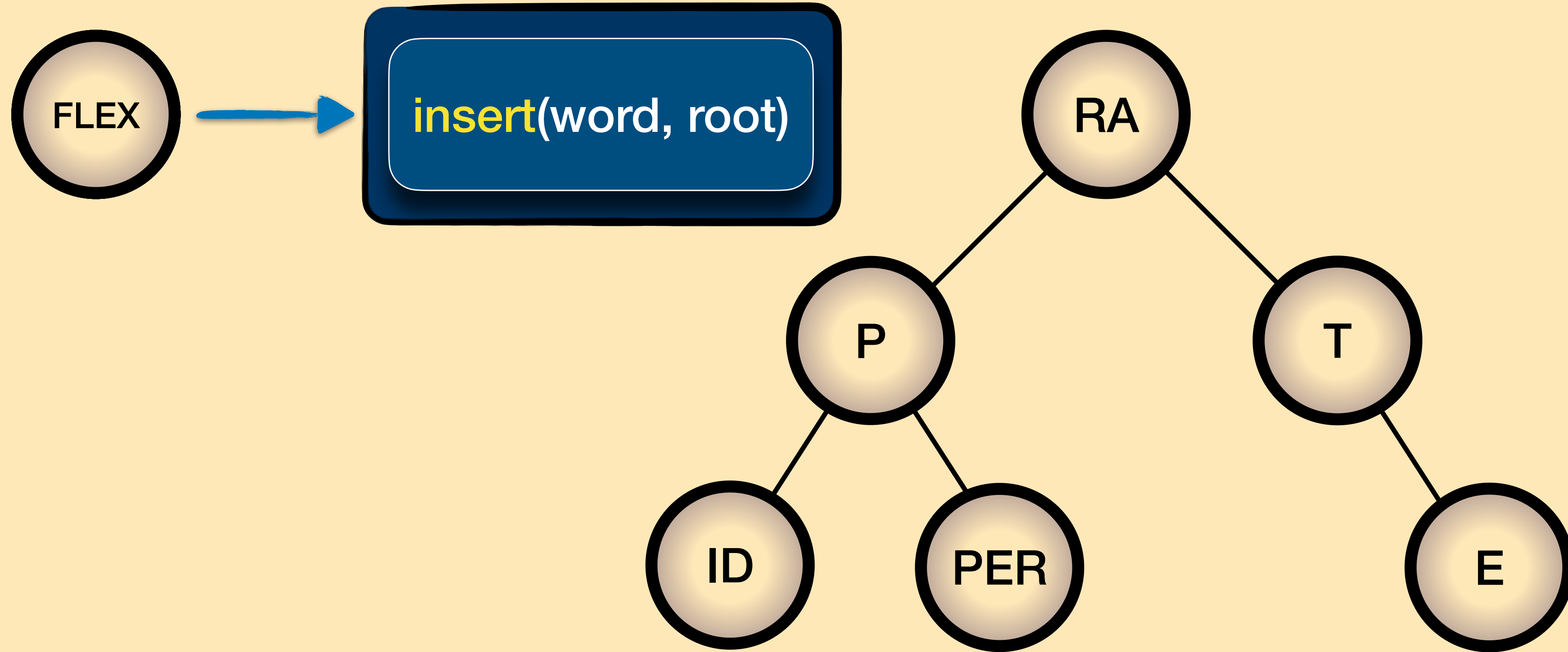


Compact Trie: **case I**

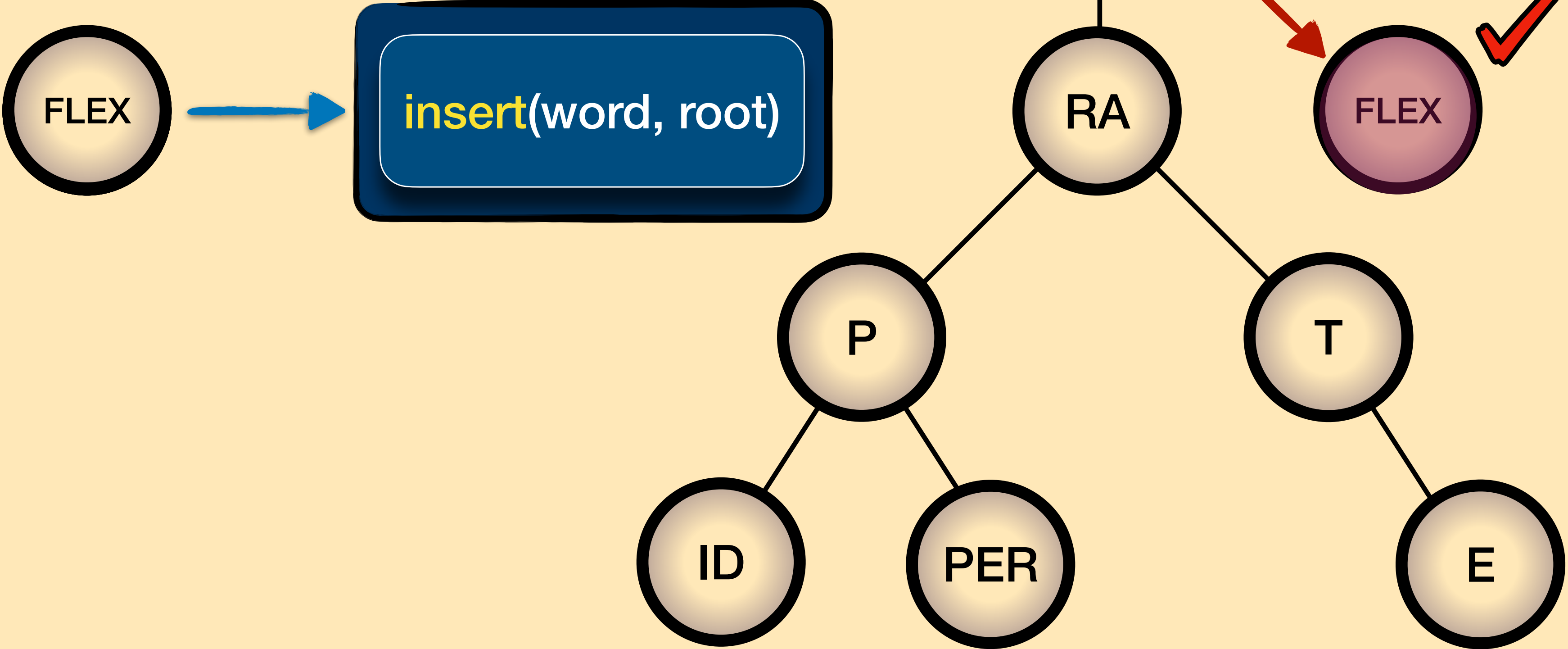


Check identity to node

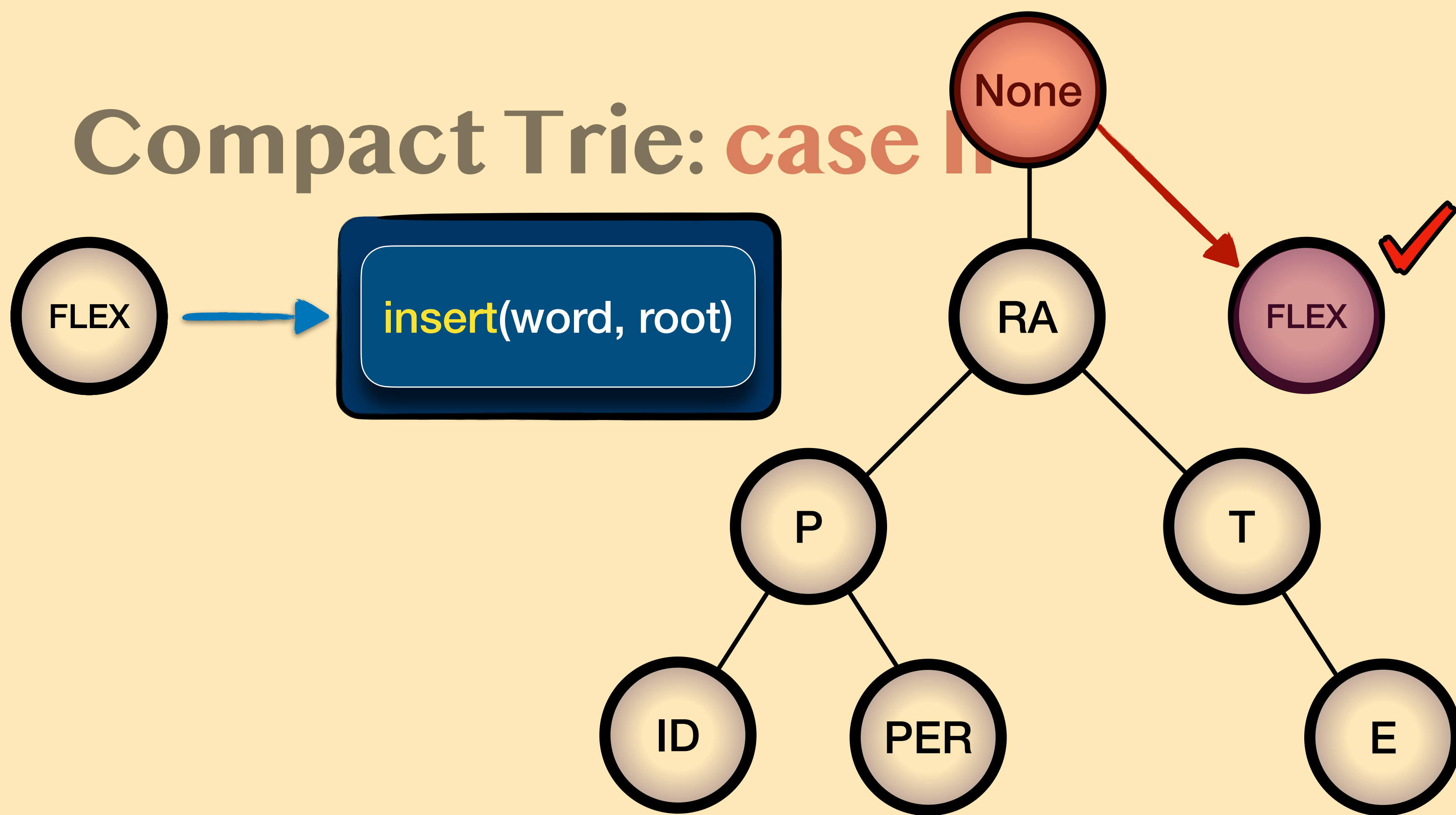
Compact Trie: **case II**



Compact Trie: **case II**

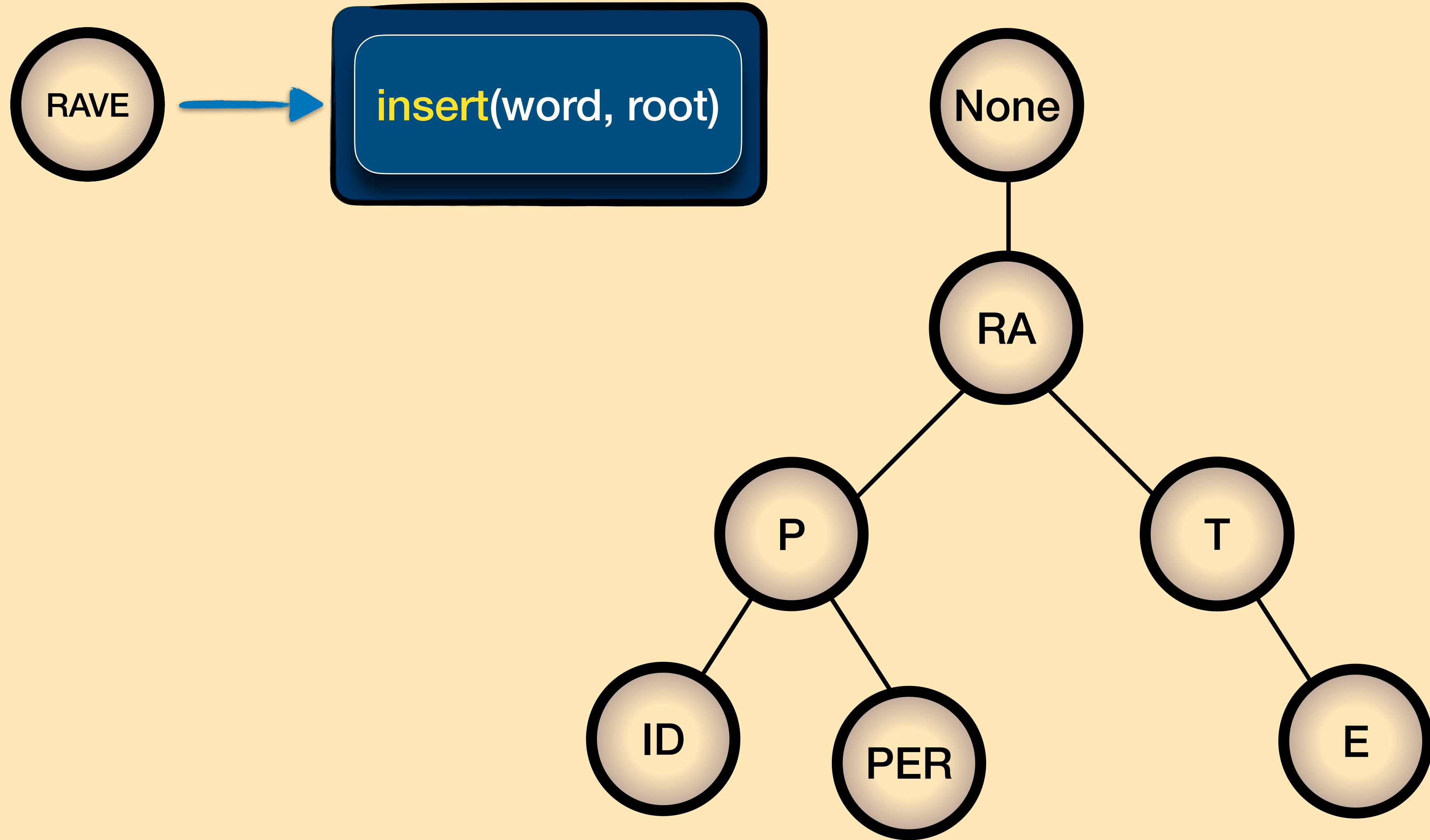


Compact Trie: **case II**

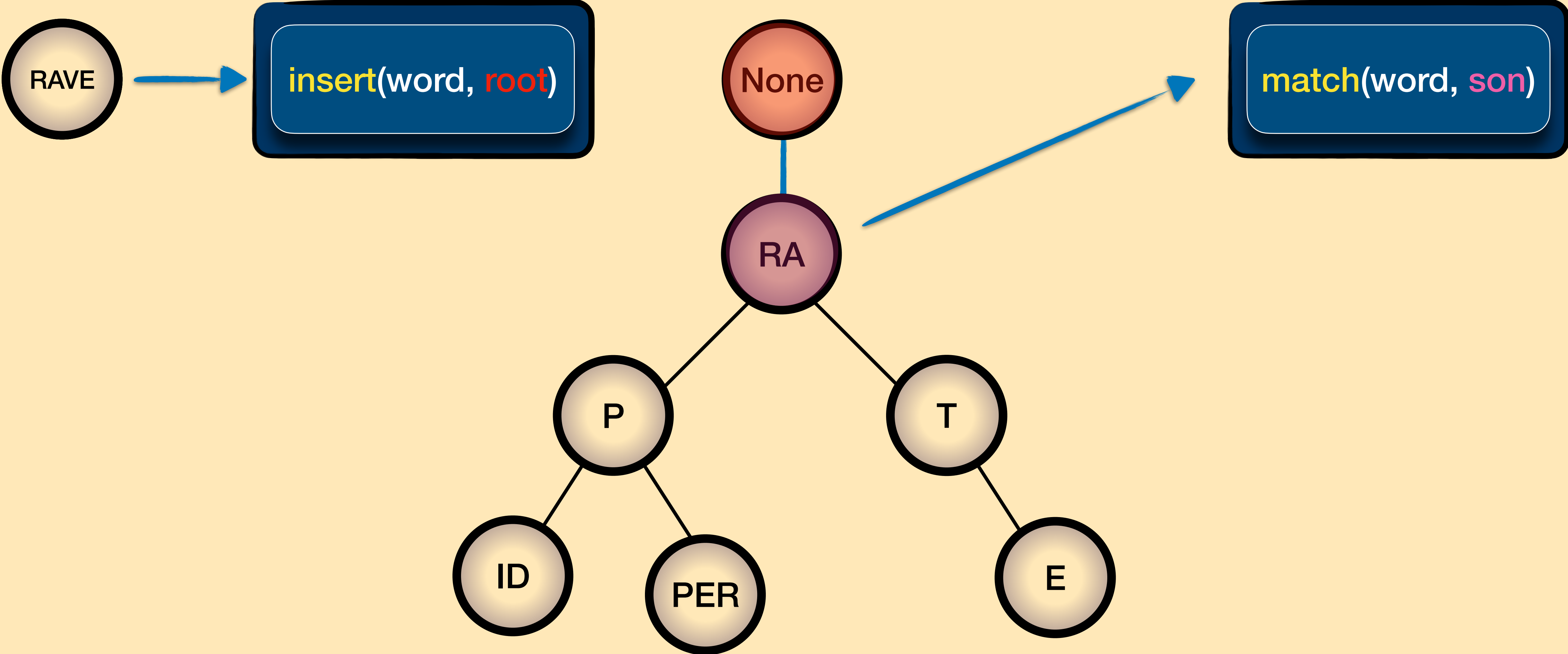


Check existence of first letter

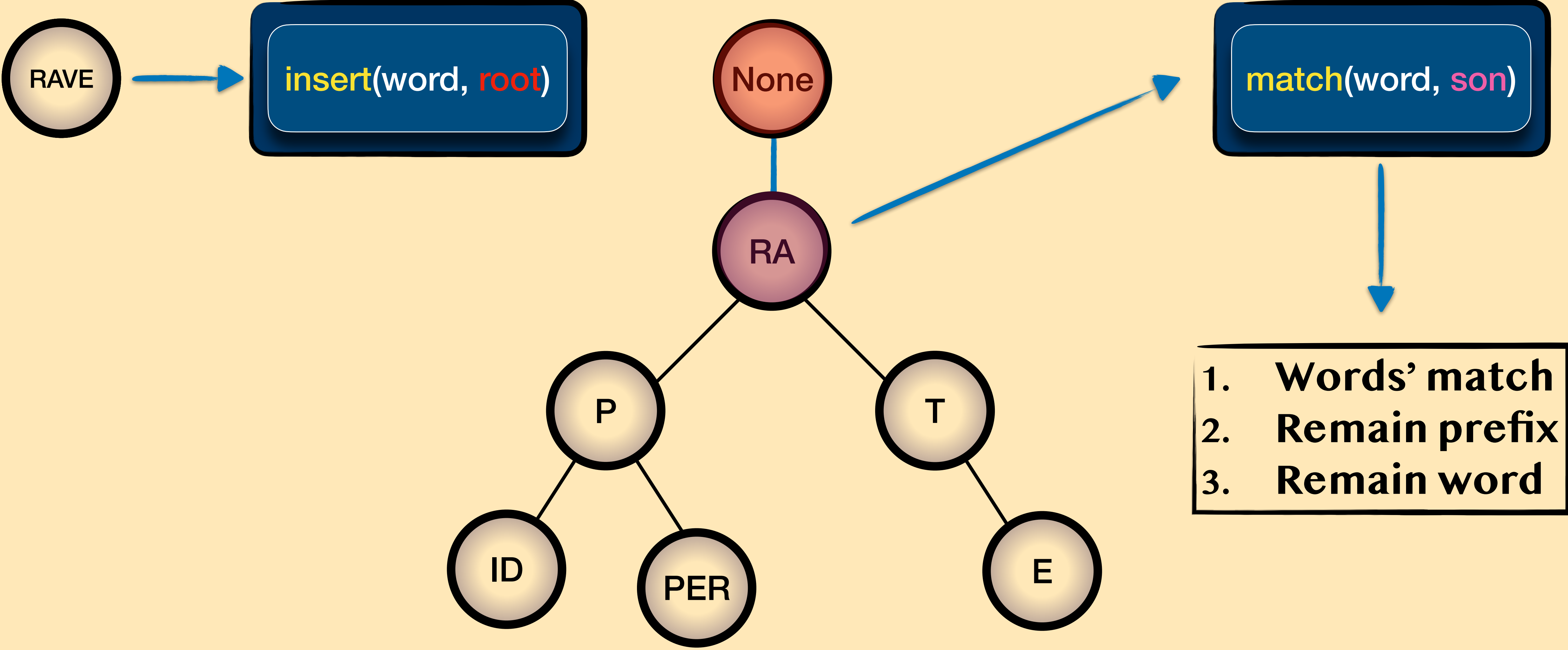
Compact Trie: **case III**



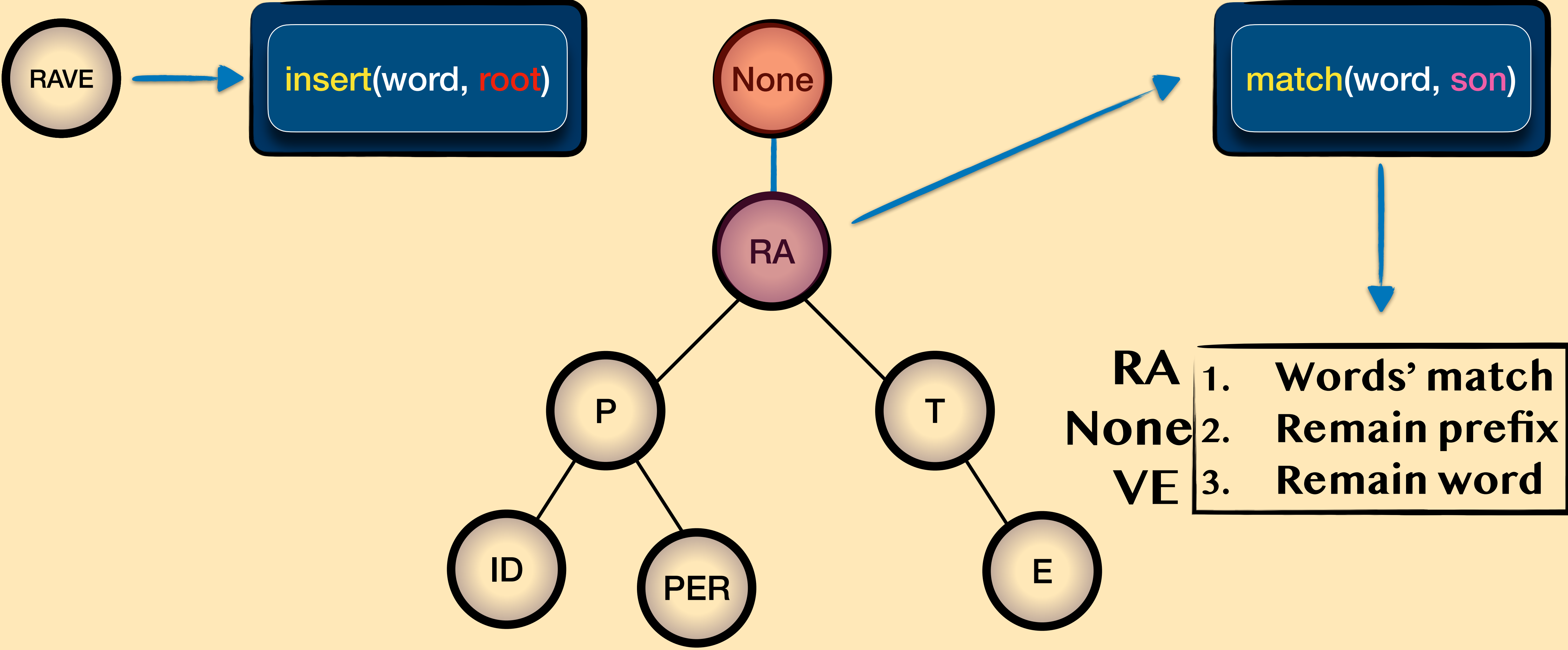
Compact Trie: **case III**



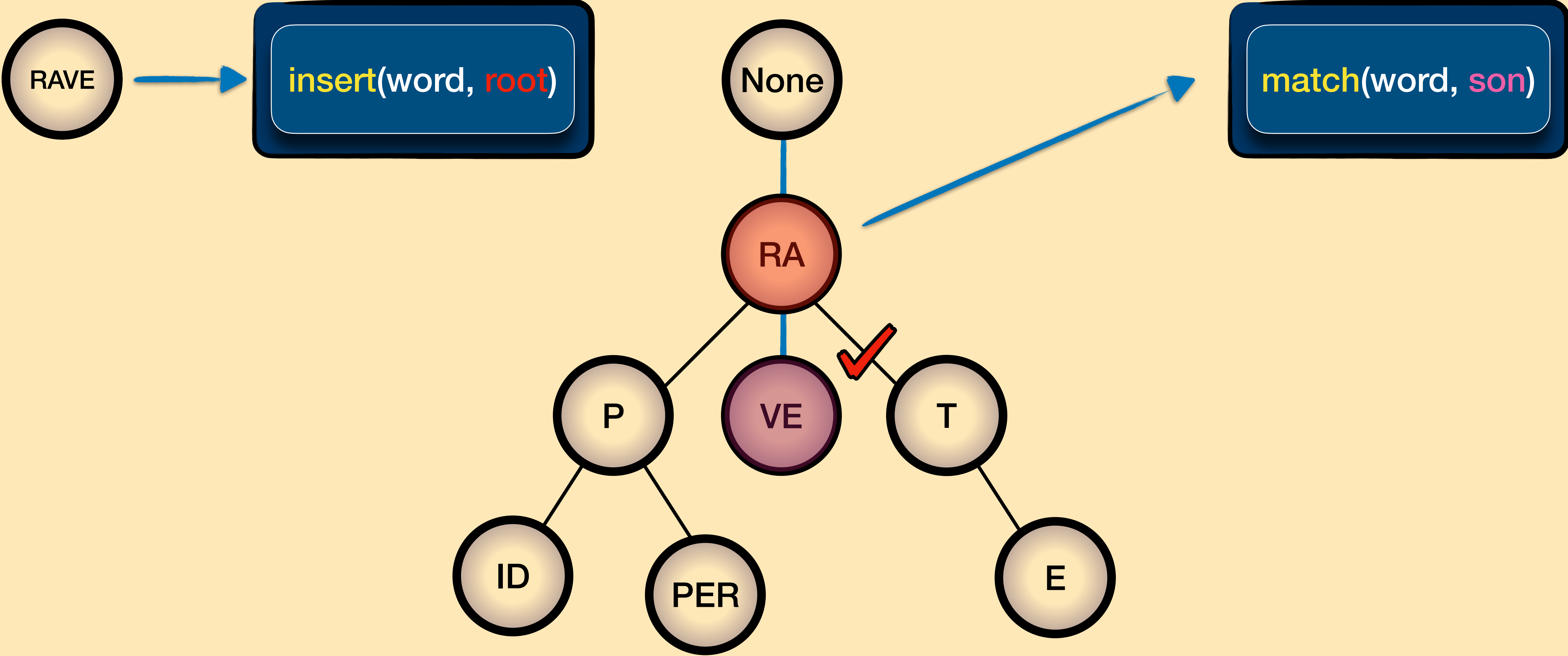
Compact Trie: **case III**



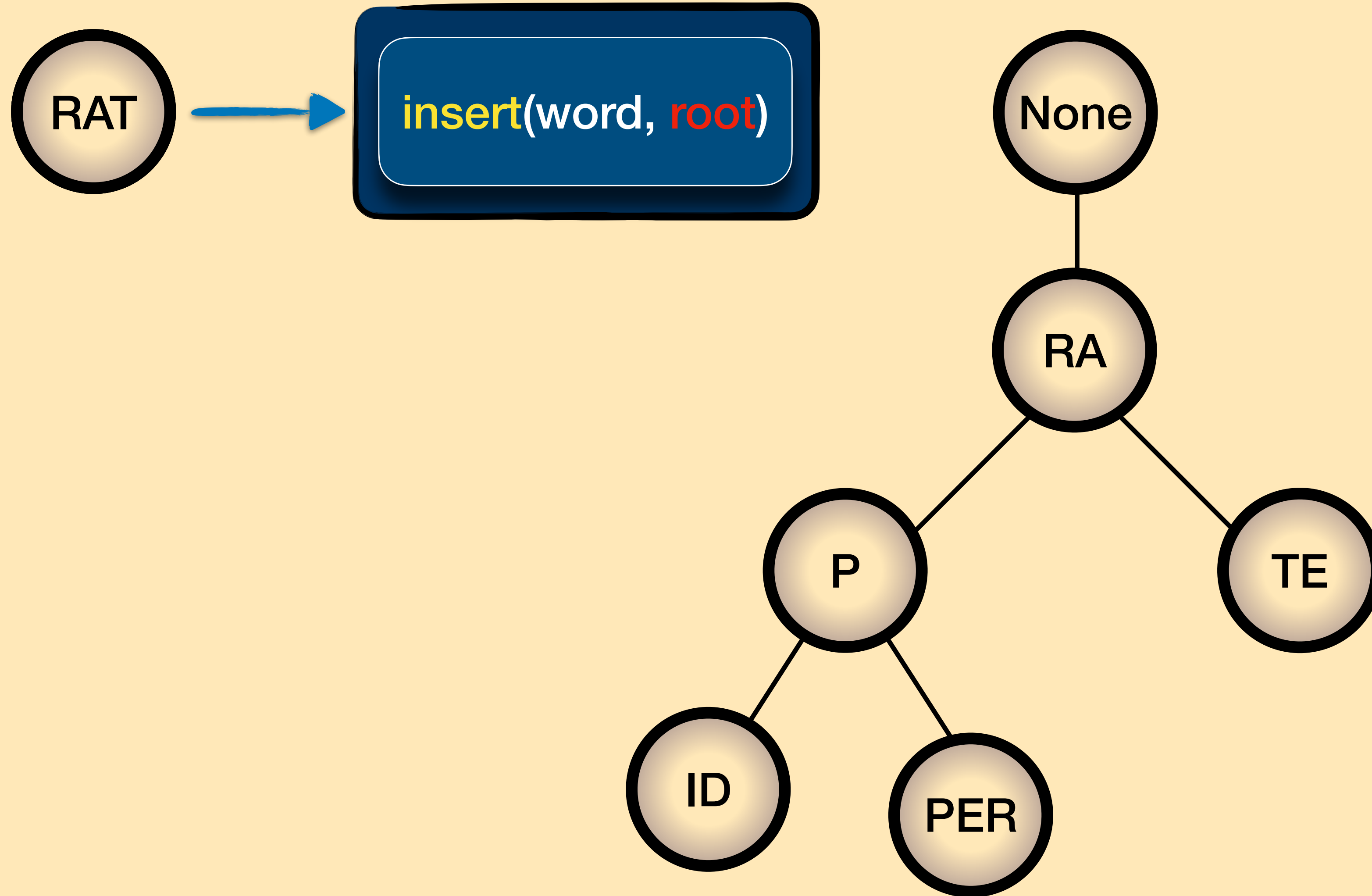
Compact Trie: **case III**



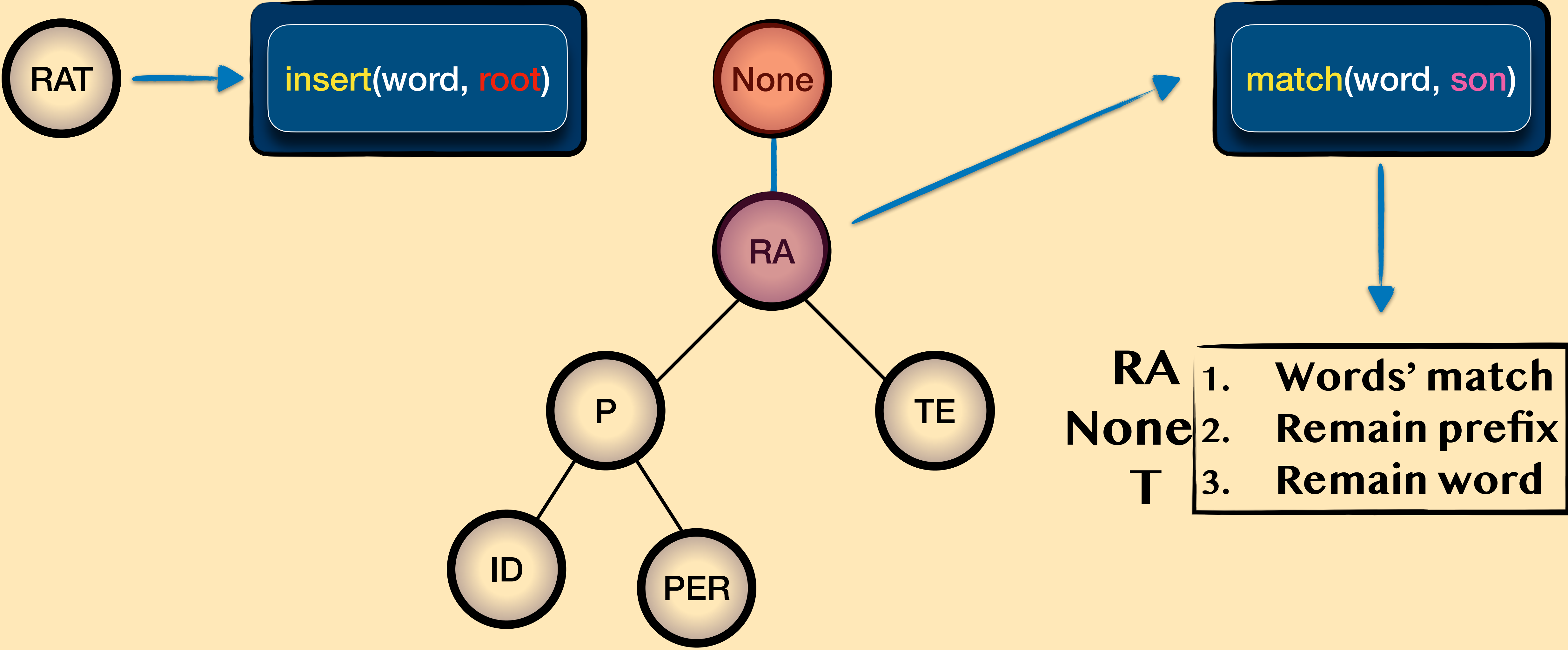
Compact Trie: **case III**



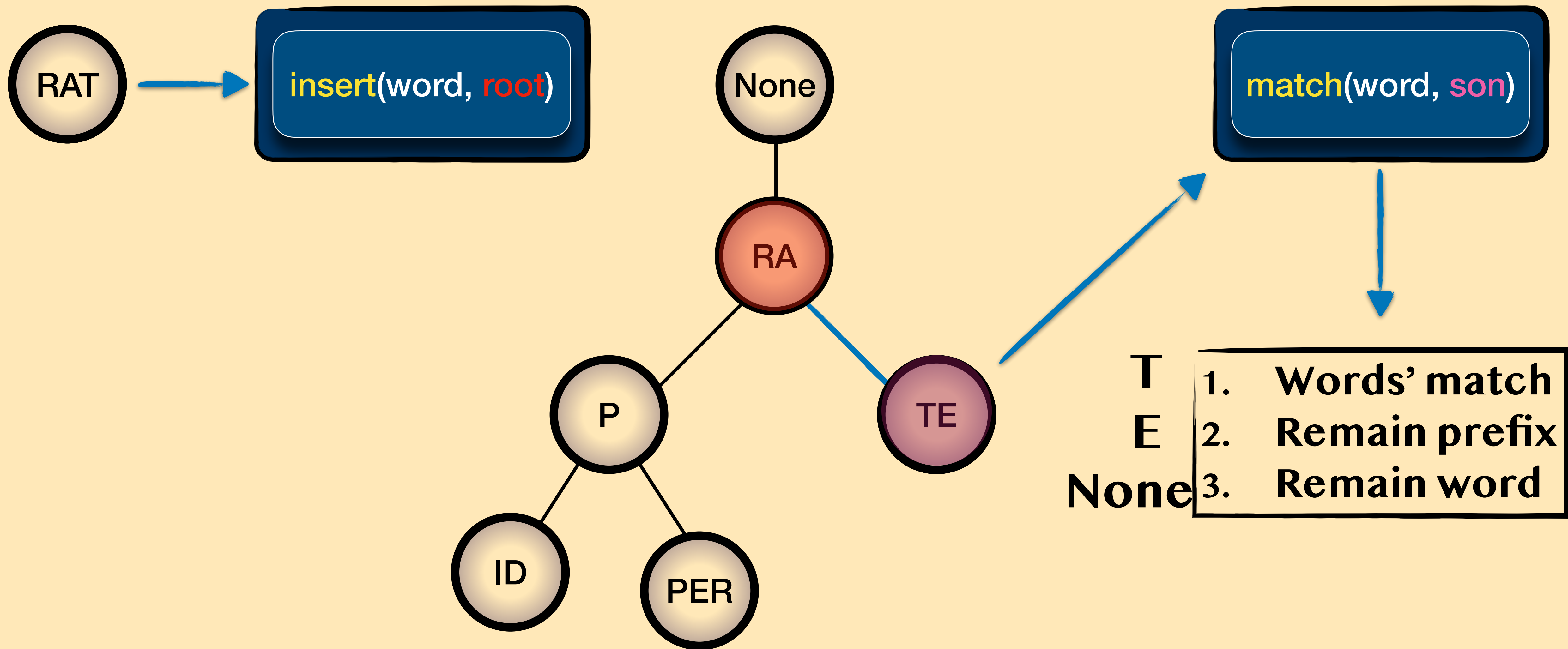
Compact Trie: **case IV**



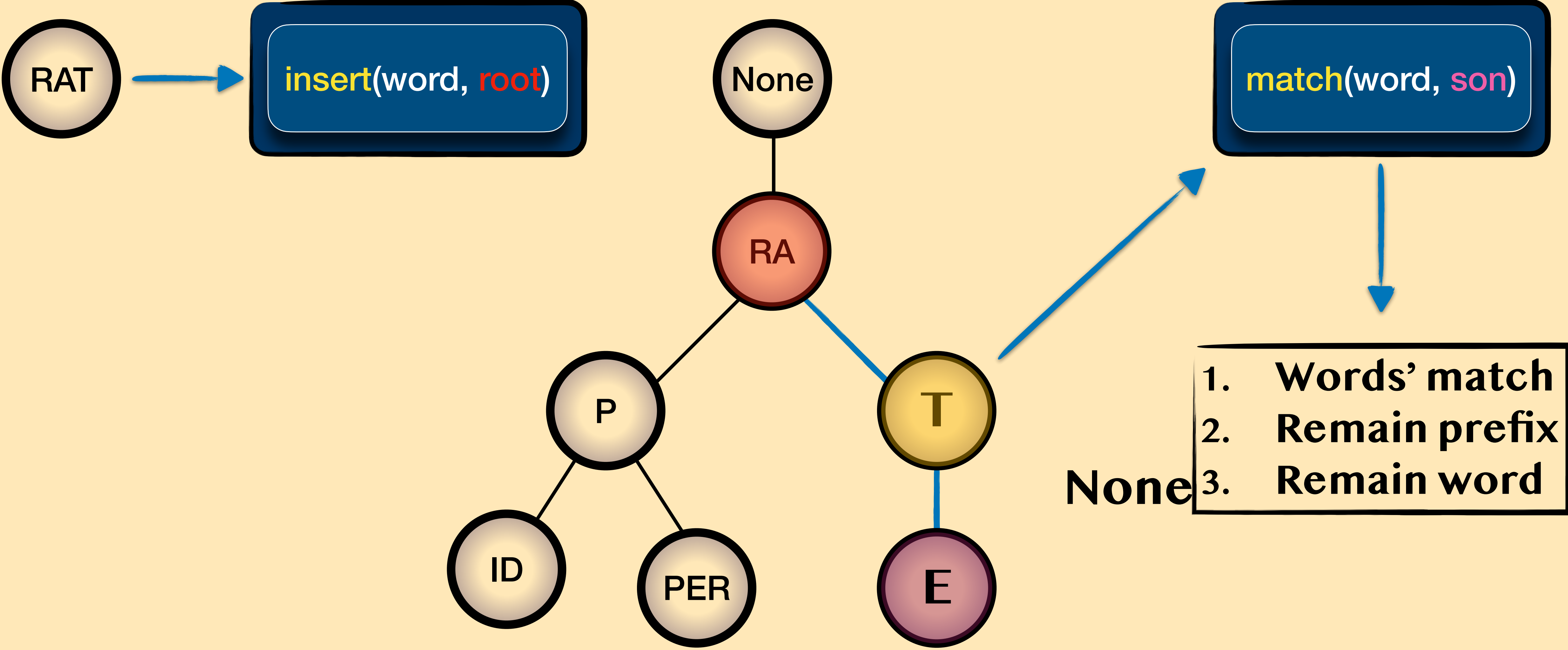
Compact Trie: **case IV**



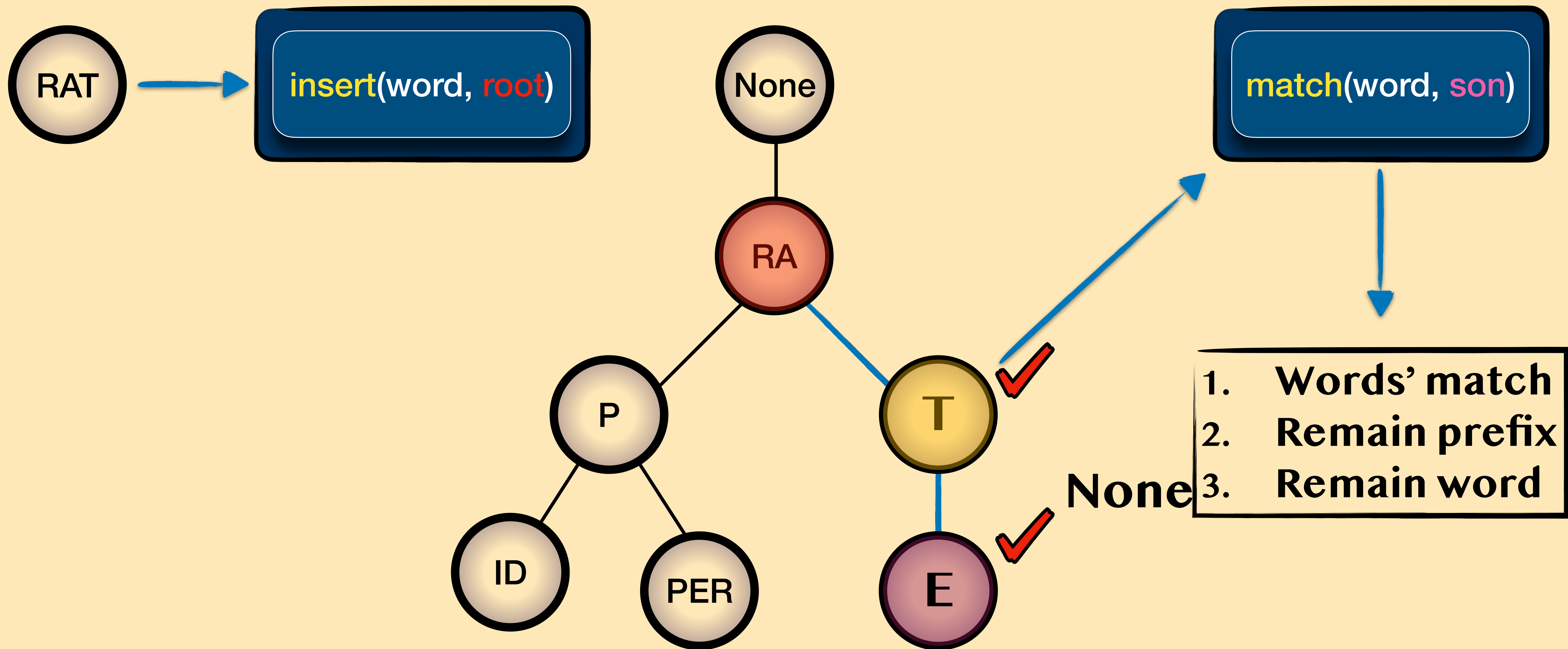
Compact Trie: **case IV**



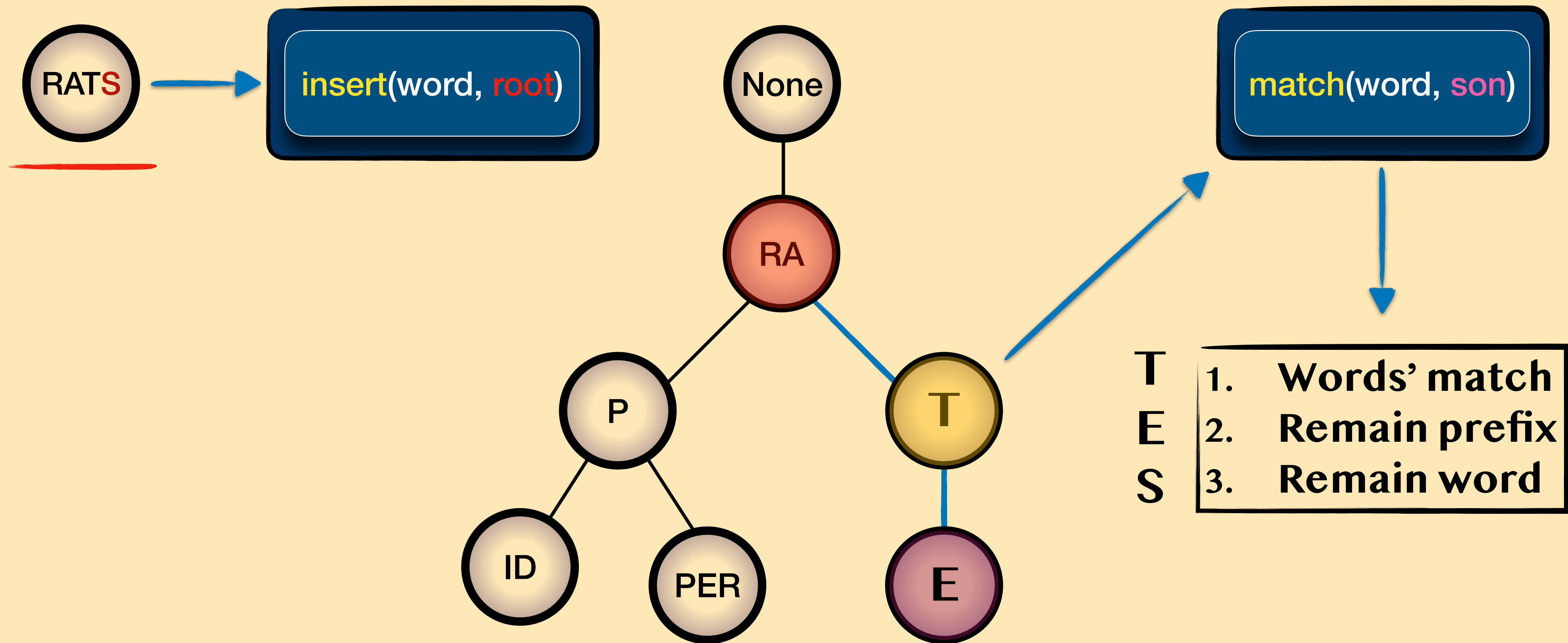
Compact Trie: **case IV**



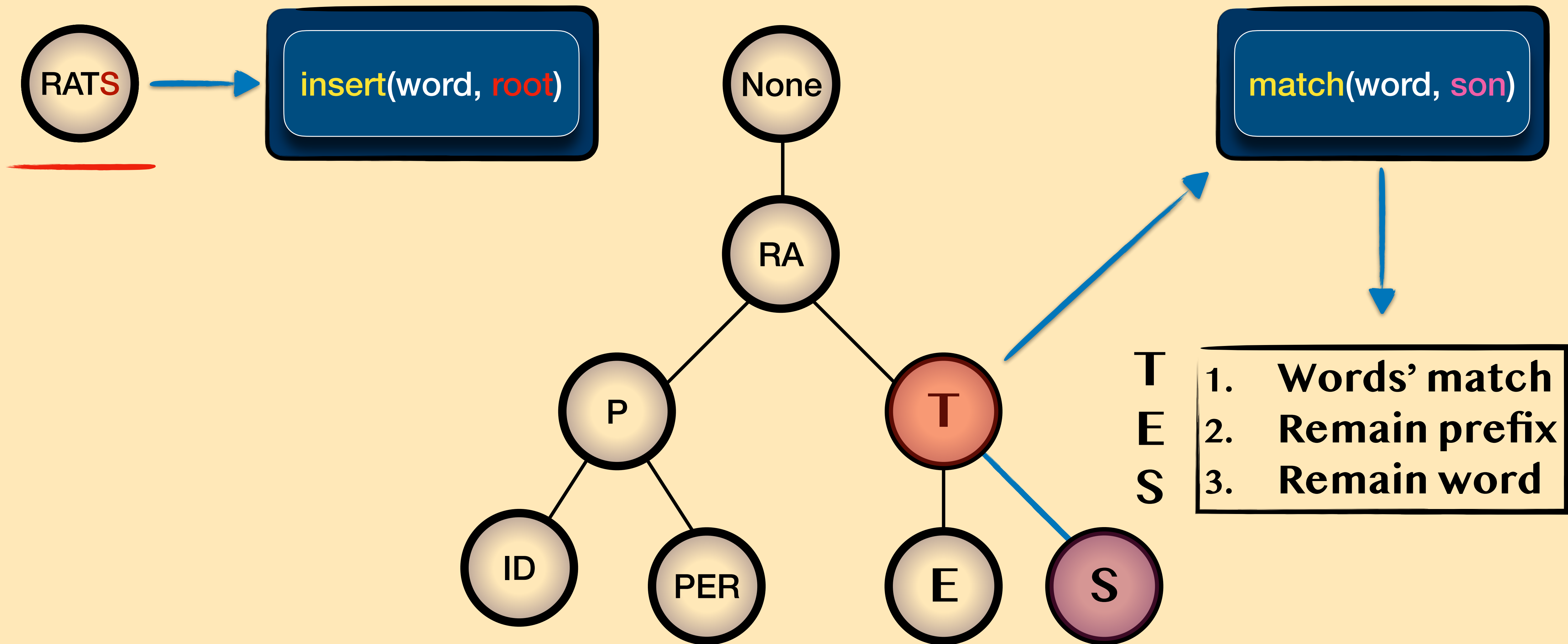
Compact Trie: **case IV**



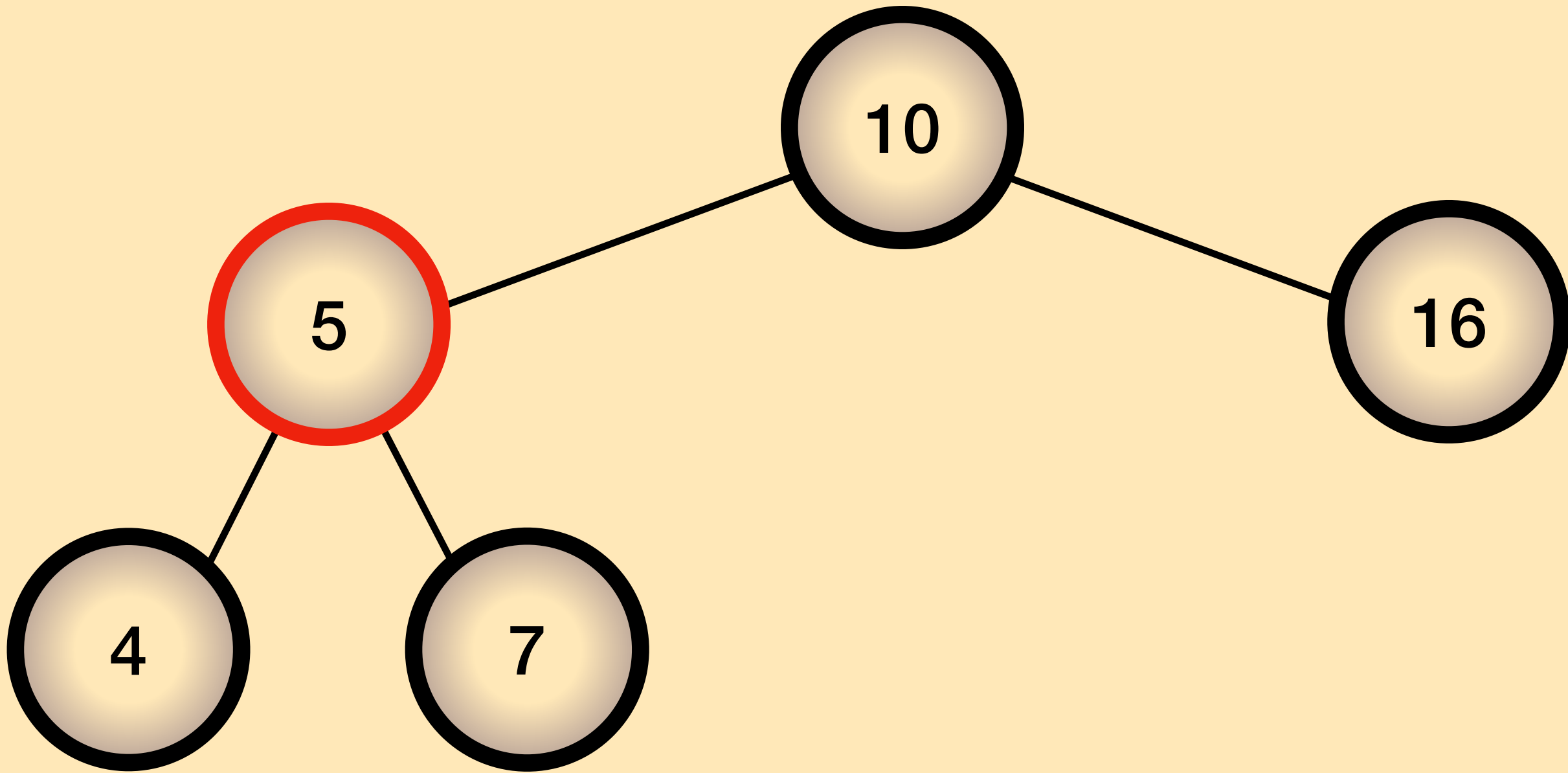
Compact Trie: **case IV.II**



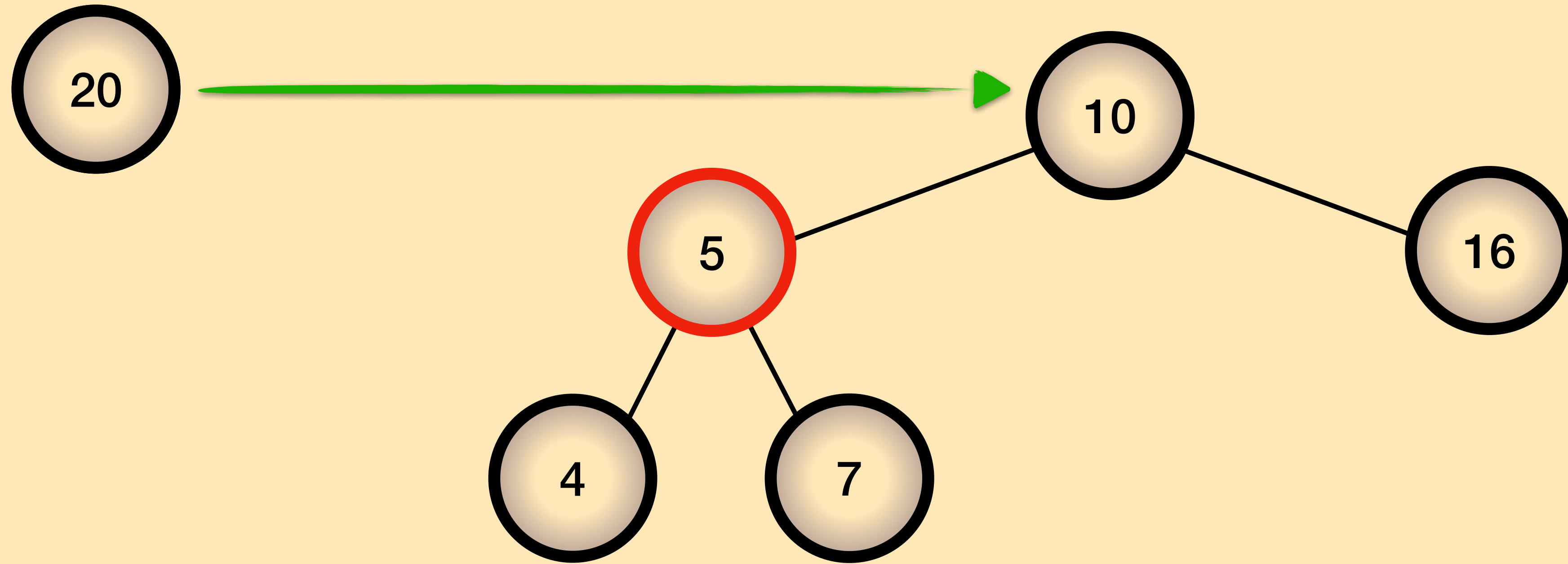
Compact Trie: **case IV.II**



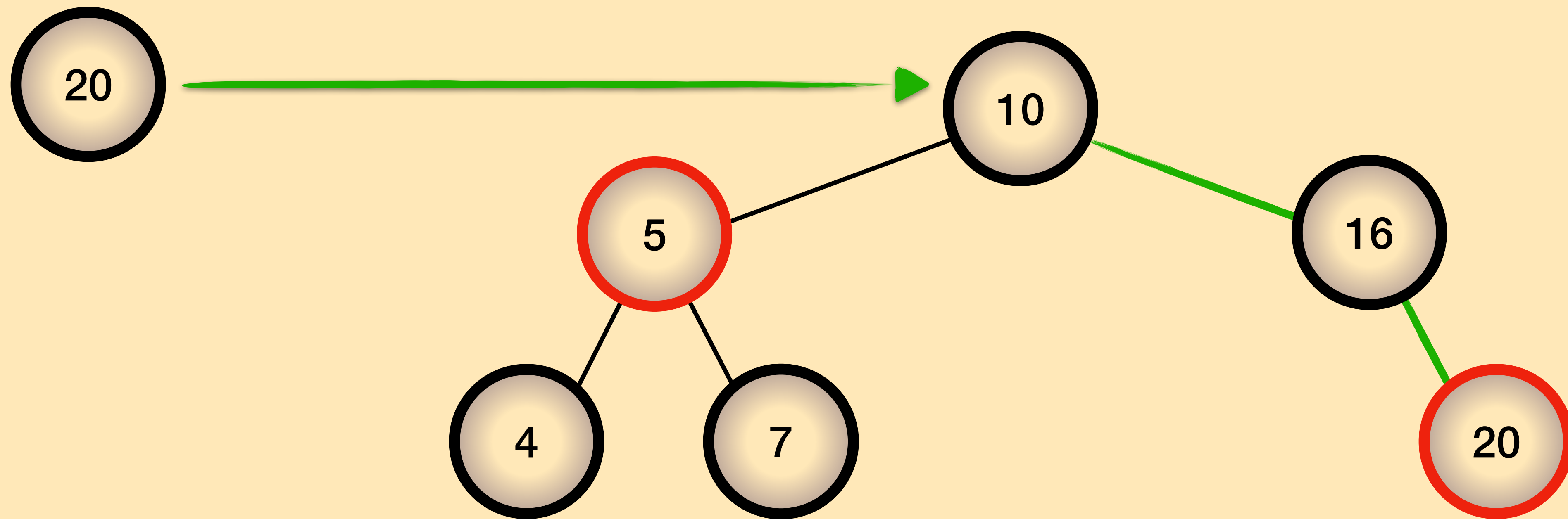
Red-Black Tree: **case I**



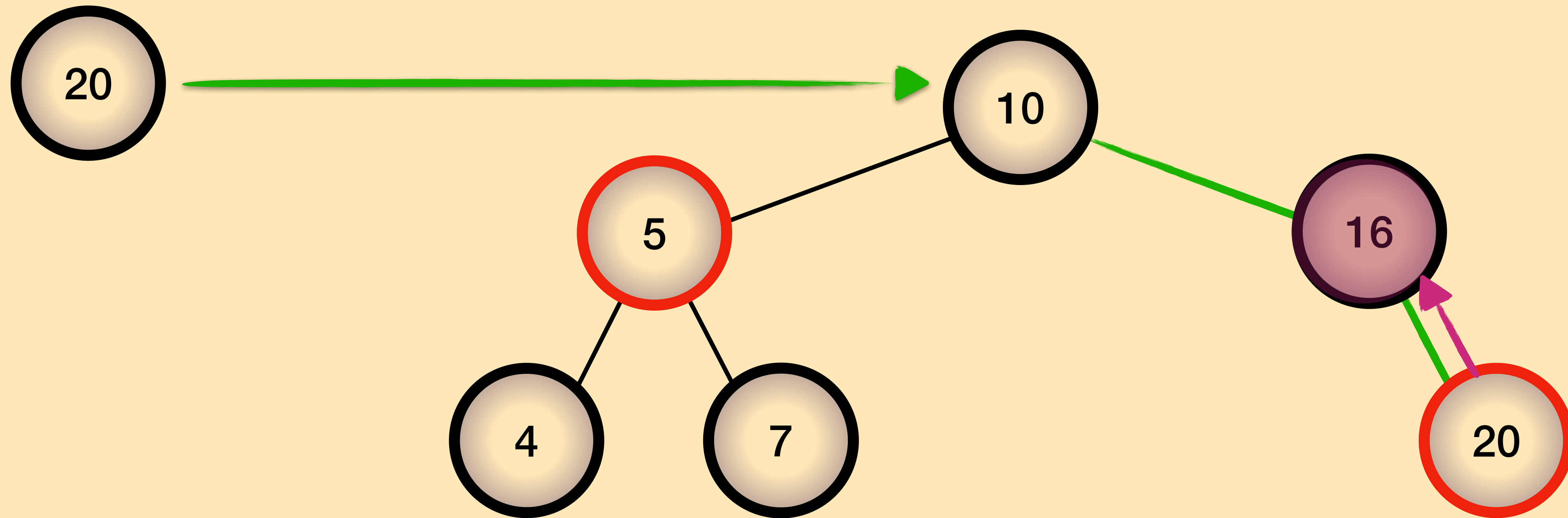
Red-Black Tree: **case I**



Red-Black Tree: **case I**

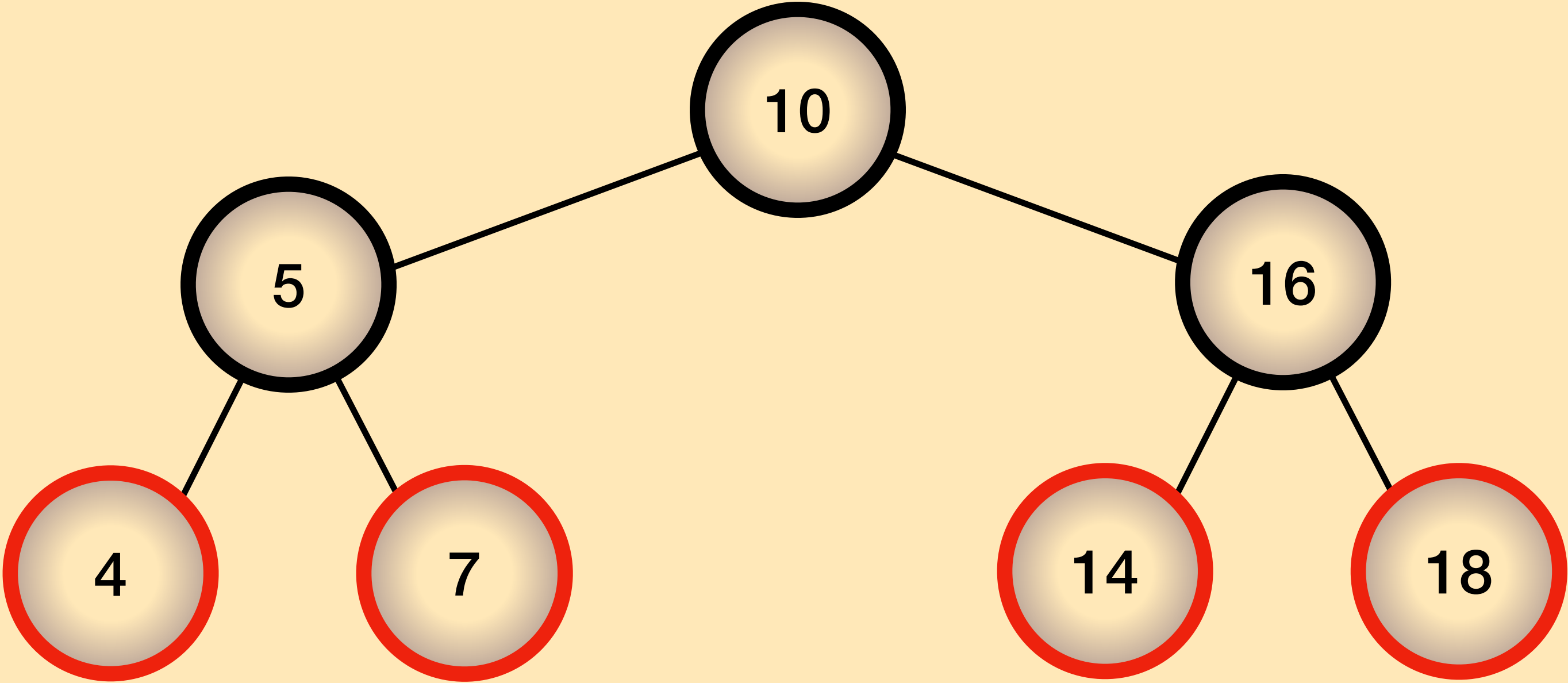


Red-Black Tree: **case I**

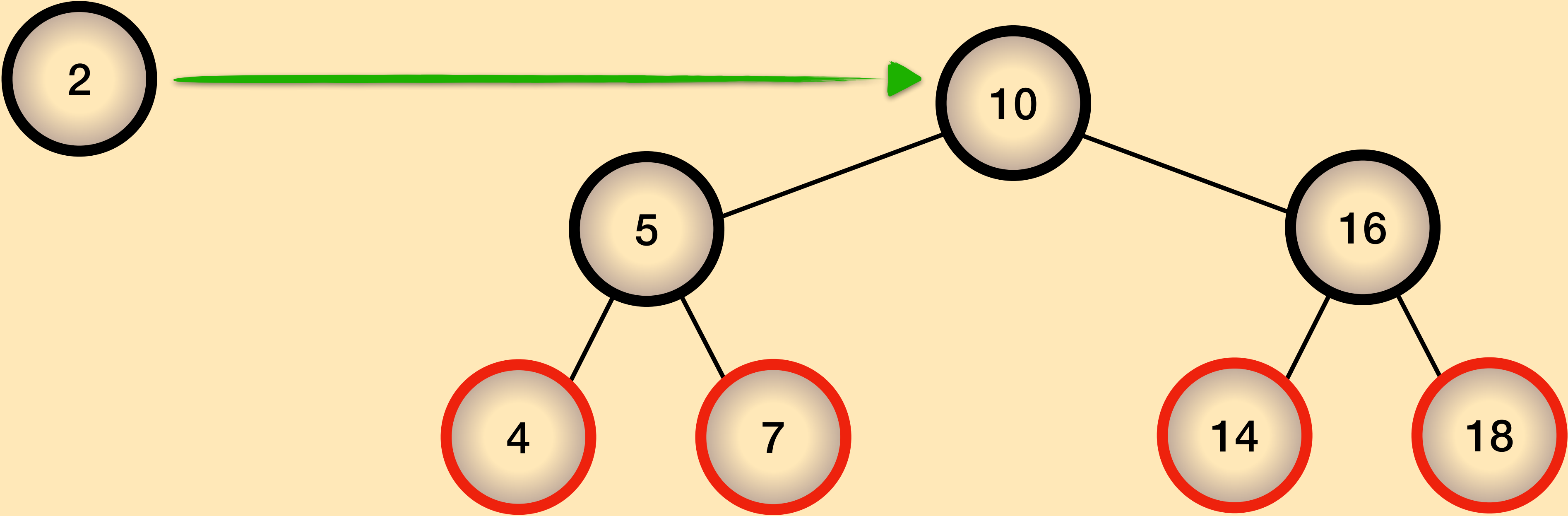


Father Black - Okay

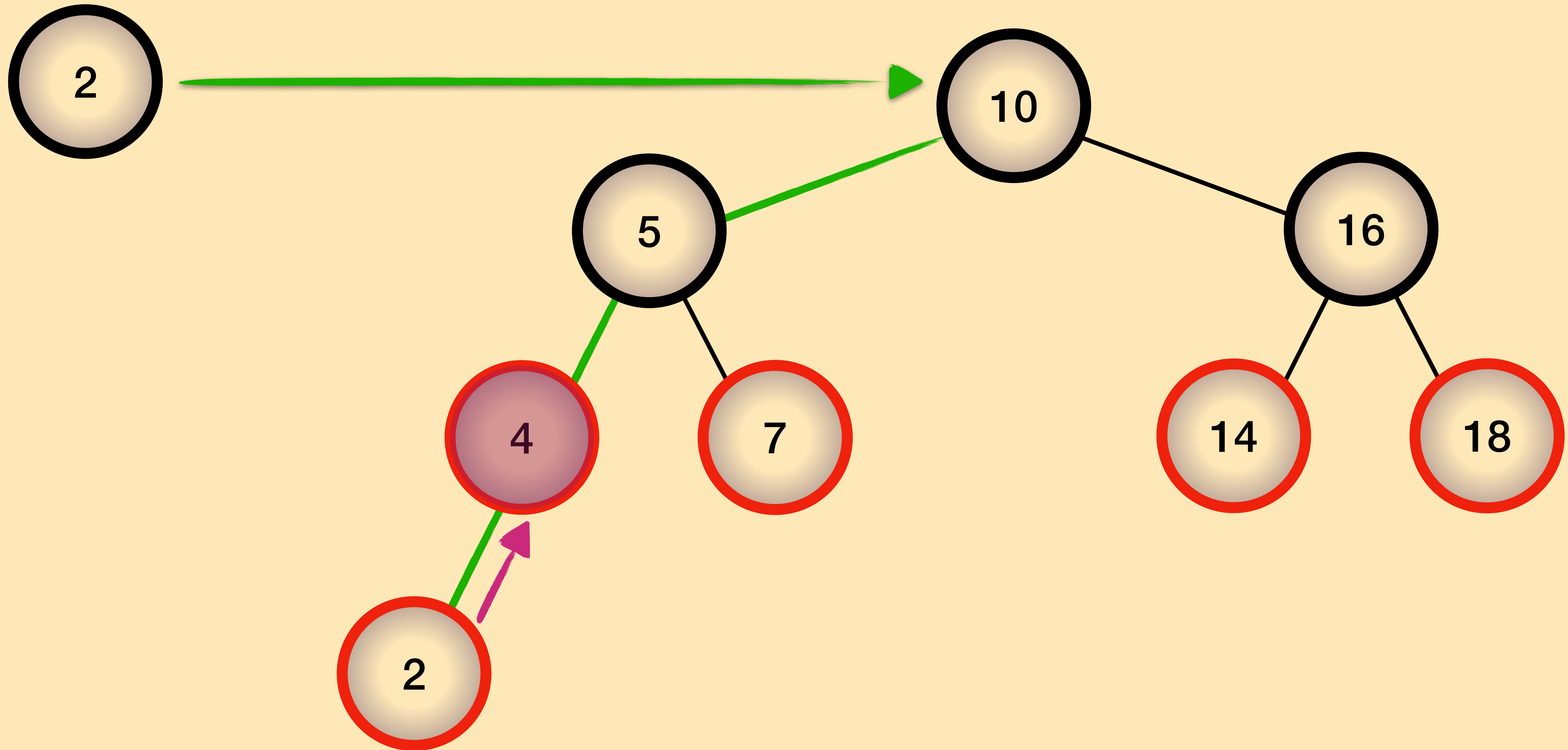
Red-Black Tree: **case II**



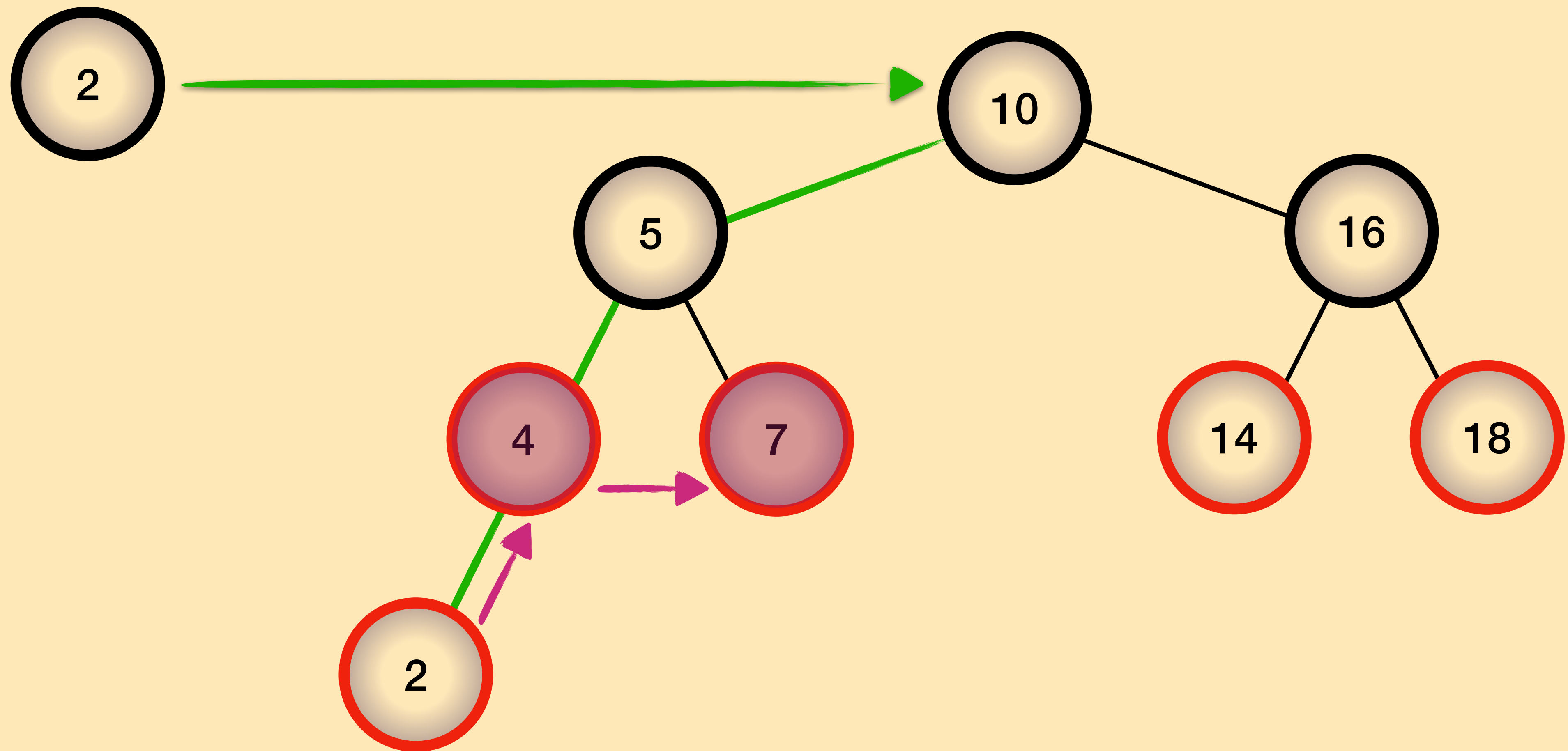
Red-Black Tree: **case II**



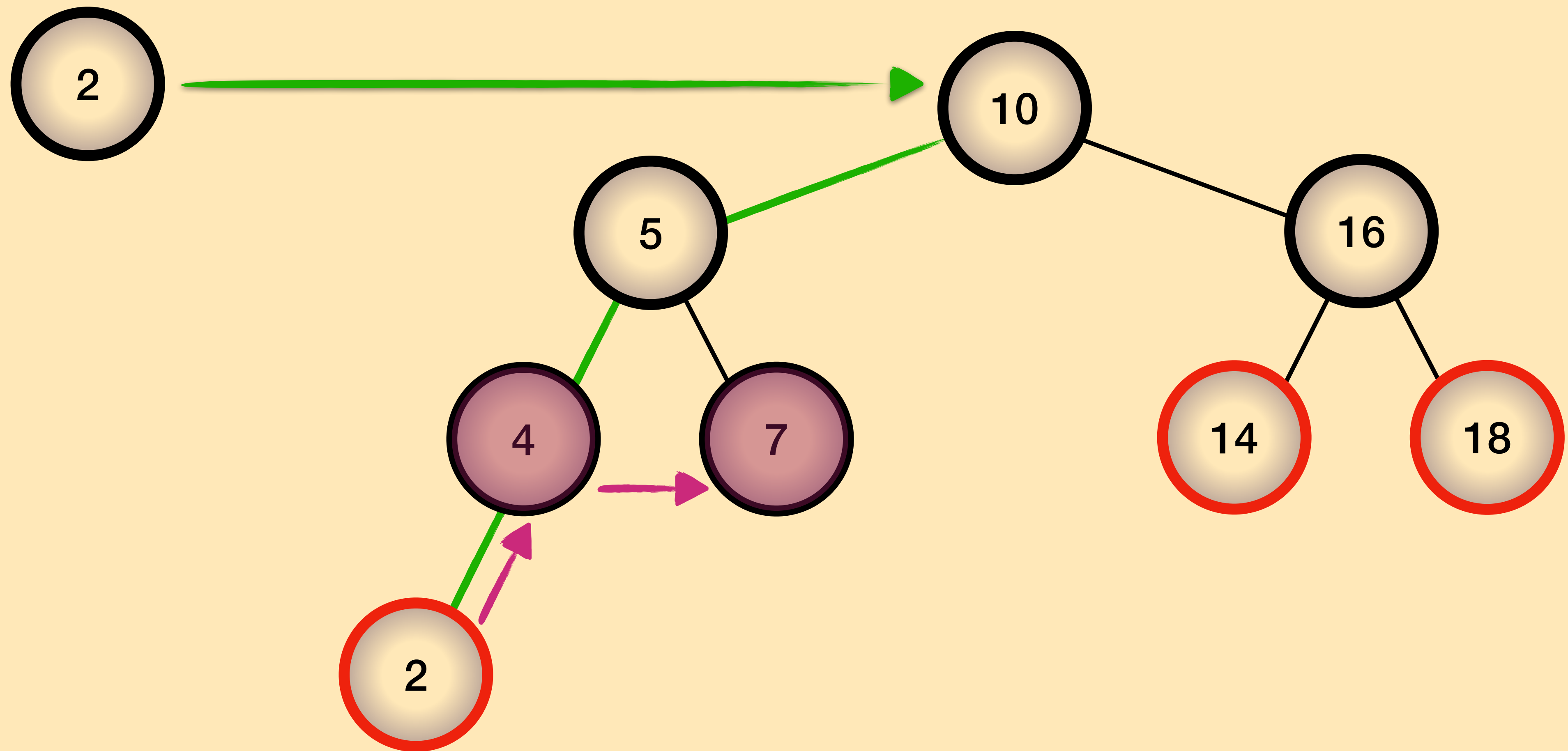
Red-Black Tree: **case II**



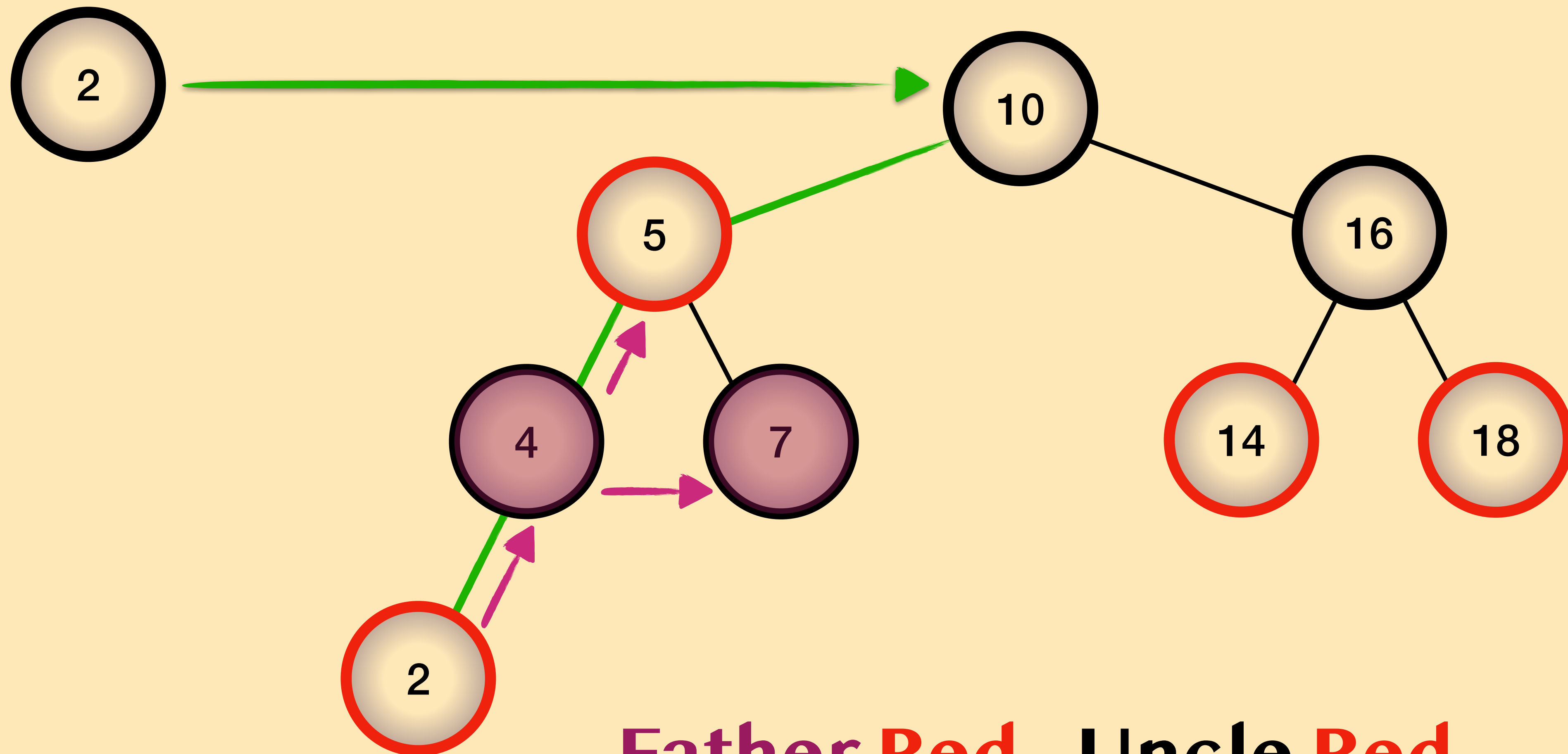
Red-Black Tree: **case II**



Red-Black Tree: **case II**



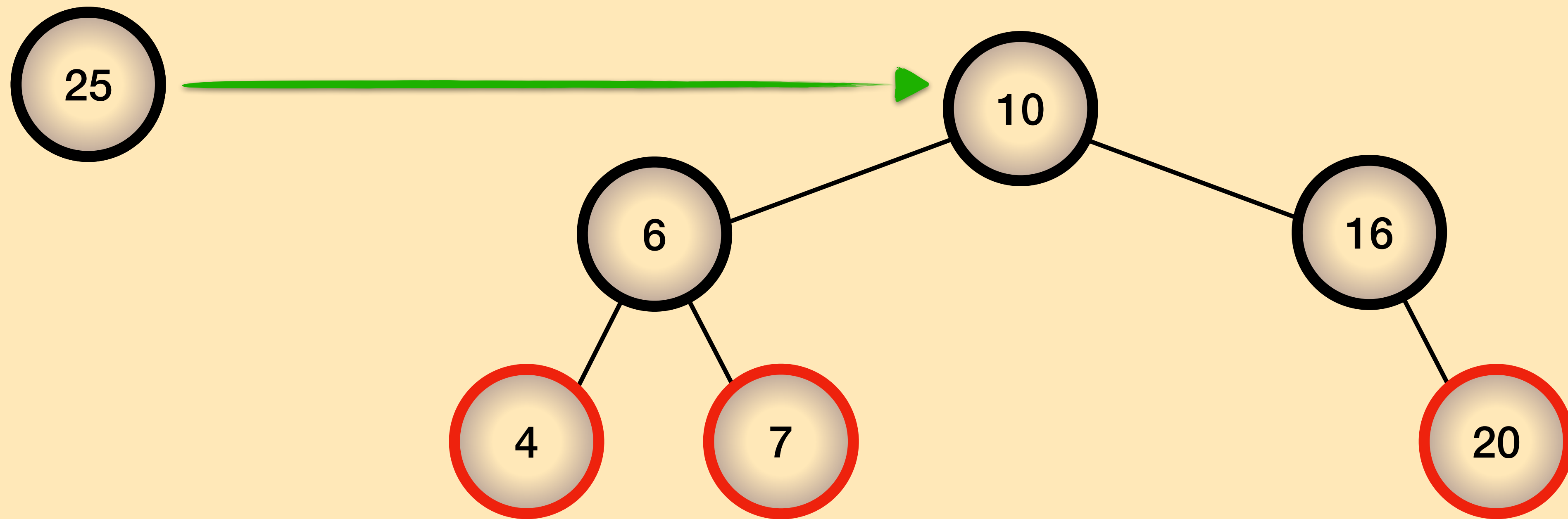
Red-Black Tree: **case II**



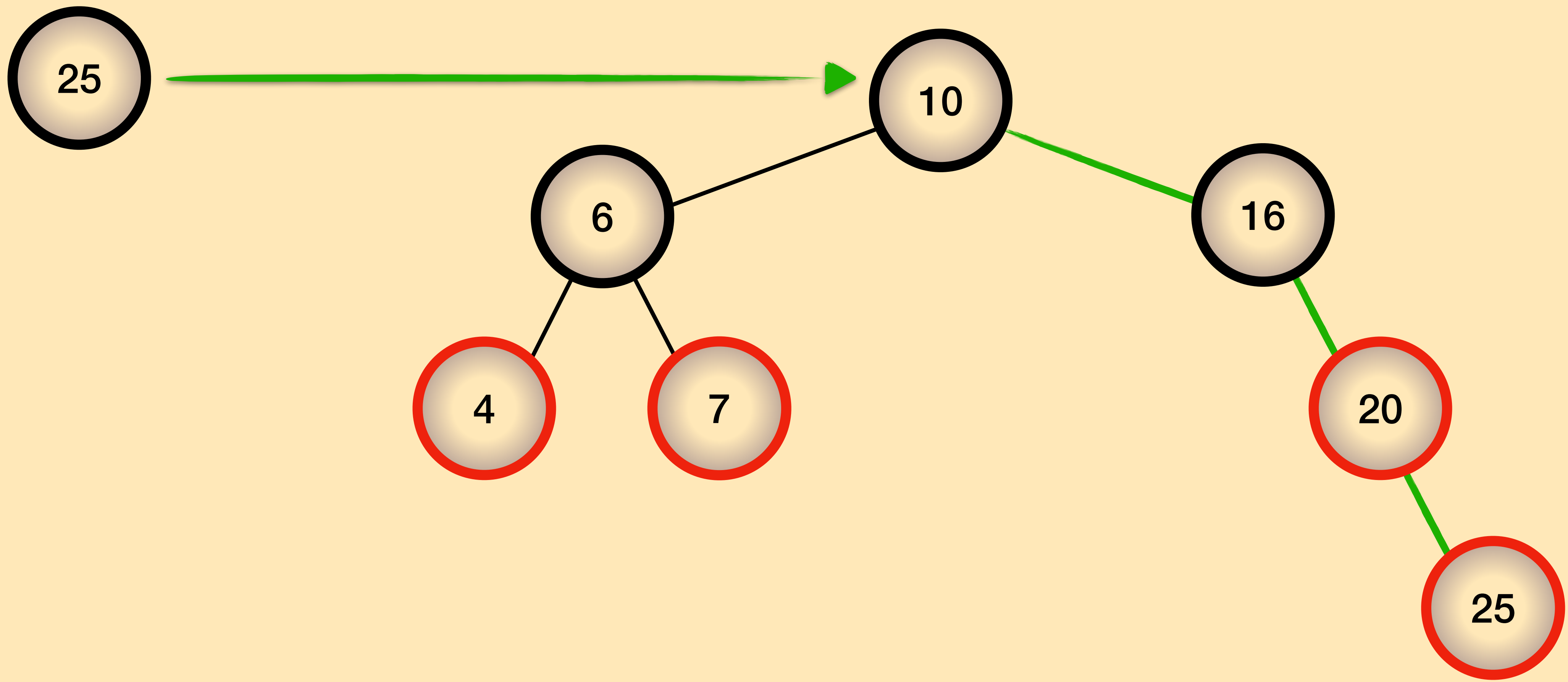
Father Red - Uncle Red

Change both to Black & GF to **Red** if not root

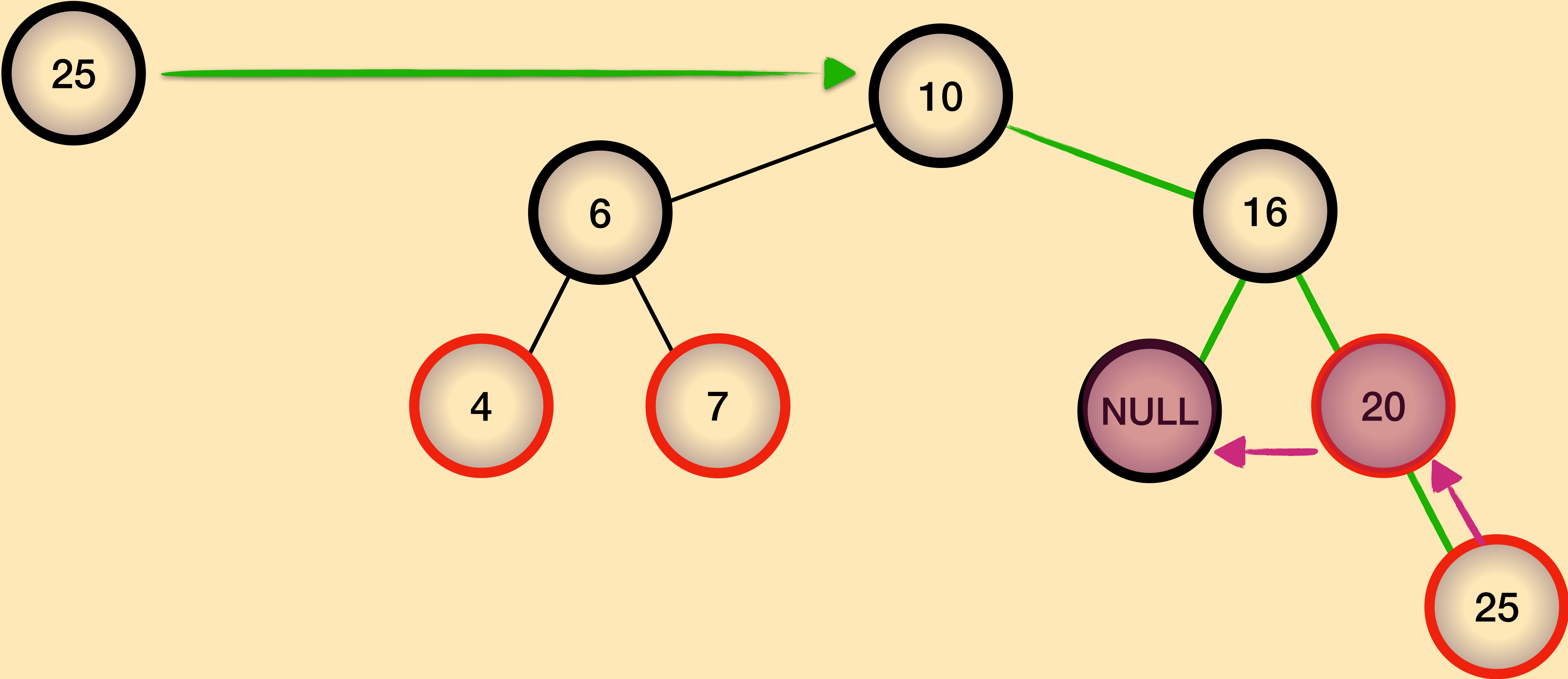
Red-Black Tree: **case III**



Red-Black Tree: **case III**



Red-Black Tree: **case III**



Red-Black Tree: **case III**

