What is meant by 'x and parent are not linear' in the rb tree pseudocode?
http://beastie.cs.ua.edu/red-black/insert-rb.html

You will pass a node pointer into your insertion fixup method. In the method, that pointer is referred to as x; in some cases, x doesn't change, and the fixup method finishes, but in other cases, the method keeps working upwards in a tree by changing the pointer to x's grandparent, until the loop exits by one of the cases seen in the pseudocode.

I'm currently stuck on this as well. I believe the 'x and parent are not linear' means that x is a right child while parent was a left child or vice versa. I haven't been able to come up with the proper if statement to test this though, unfortunately.

David I know what the pseudocode is for. I just don't understand the phrase 'x and parent are not linear'... I think the other guy who commented may be right though.

it would be
if(parent(x) is left) {
    if(x is right) not linear
}
if(parent(x) is right) {
    if(x is left) not linear
} otherwise linear

Subject: Re: RB TREE PSEUDOCODE QUESTION
Posted by davidmccoy on Mon, 06 Mar 2017 19:12:28 GMT
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^^ this guy’s got it. Put that in a isLinear(bstNode *) function and you’re square.