I use ubuntu to test my code successfully.

I write this homework in c++ language

This homework is much harder than homework1, and I try to figure out why root node first point to NULL, but after lots of operation, root node is still point to NULL(because in my function, I change the position root pointed to). Finally, I figure out what happen: because I use recursive function, so the outer layer of recursive's root node is still point to NULL. So amazing recursive is!