In this assignment, you will complete the code for insertions in a Red-Black tree. We've provided a framework with comments. You should complete the sections labeled "TODO"

You are also required to follow any directions accompanying comments such as "NOTE".

You can add/modify code anywhere, with the exception of the provided "main" (which we will use for testing).

You can use the constants RED and BLACK, instead of the ints 0 and 1, when appropriate.