



I I T G O A

CS193 Data Structures and Algorithms Lab

20 Mar 2018

Red-Black trees

The attached file contains the first million primes (from <http://primes.utm.edu/>).

Implement a red-black tree with *insert* and *search* operations. Read the primes into the tree. The output should look like this.

Sample Output

```
bash$ ./a.out
Enter n: 15

Sorry! 15 is not a prime! The next prime is 17

The tree has height XX
```

The linux implementation can be seen at
<https://github.com/torvalds/linux/blob/master/lib/rbtree.c>

