BLG335E Analysis of Algorithm

Project 5

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A – Update the name of a person

Implement update with delete + insert

1 - delete the key O(log n) (Delete functions have more cases like a insert)

2 - insert a new node with the new key O(log n)

B – Update the ages of all people by(1)

If the person is adult nothing will change.

If the person is non-Adult(lower than 17) nothing will change.

If the person age is 17;

numAdult++;

numNonAdult--;

C – Screen-shot of my output

```
Emres-MacBook-Pro:Downloads emre$ cd 150120138/
Emres-MacBook-Pro:150120138 emre$ ls
944146.cpp      944190.pdf
Emres-MacBook-Pro:150120138 emre$ g++ *.cpp
Emres-MacBook-Pro:150120138 emre$ ./a.out input.txt
(B)Glen F 29
-(B)Dane F 14
--(B)Blair F 11
---(R)Alex M 13
---(R)Casey F 35
--(B)Evan M 18
---(R)Fran M 30
-(R)Leah F 23
--(B)Izzy M 27
---(B)Hayden M 28
---(B)Jude F 26
----(R)Kelly F 24
--(B)Ryan F 17
---(R)Parker M 19
----(B)Naomi F 21
-----(R)Morgan M 22
-----(R)Ogden M 20
----(B)Quinn M 18
---(B)Taylor F 14
----(R)Shane M 16


The 5th Adult is: Hayden
The 3th Non-Adult is: Dane
```