# 18556 - Gautam

## /\* Evaluation:

### 1. Code compilation:

- 1. Does code compile without errors? Yes.
- 2. Was a readme.txt file included with instructions on how to compile and run? yes.

### 2. Correctness (positive test cases):

- 1. Can I insert a key? No. Keys are read only from file.
- 2. Can I delete a key? Not implemented.
- 3. Can I search for a key? No.
- 4. Can I view display of tree? No.
- 5. Can I specify size of B+ tree node (# of keys in a node)? no. It seems to be hard coded in the Node Class:

int max\_length=4;//no. of keys to be put in the each of the leaf node.

- 6. Do the nodes satisfy the B+ tree property? Unable to verify since there is no display method.
- 7. Can I create a B+ tree from a file of keys? Yes.
- 8. Can I save my B+ tree to a file? No
- 9. Can I load back the file saved in step 7? No.
- 10. Can I insert and delete keys from the command line even after loading keys from file? No
- 11. Is Output for keys1.txt correct? Unable to verify
- 12. Is output for keys2.txt correct? Unable to verify

### 3. Programming Style & General Comments:

- 1. Are there useful comments that complement the code? No
- 2. Is the indentation style neat and consistent? No. Wide gaps between methods and inconsistent indentation.
- 3. Are there had coded limits or magic numbers used in the code? Yes. Max\_length is hard coded to
- 4. Are there hard coded file paths used in the code? No

#### 4. Exception Handling:

- 1. Delete on empty tree. Delete not implemented.
- 2. Delete a non-existent key.- Delete not implemented
- 3. Insert a key that exists already (keys3.txt). Unable to validated
- 4. Call display on empty tree. Display not supported
- 5. Print an empty tree. Print not supported (though method is present).
- 6. Empty lines in input file (keys4.txt). No handled. Empty lines seem to be processed as keys.

Score - 9/20.

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