ls -al

total 76

drwxrwxr-x 2 gp012 gp012 4096 Oct 20 23:22 .

drwxr--r-- 8 gp012 gp012 4096 Oct 20 23:22 ..

-rw-rw-r-- 1 gp012 gp012 887 Oct 16 14:13 AVL\_node.h

-rw-rw-r-- 1 gp012 gp012 10953 Oct 20 23:13 AVL\_tree.h

-rw-rw-r-- 1 gp012 gp012 854 Oct 16 14:13 Binary\_node.h

-rw-rw-r-- 1 gp012 gp012 5164 Oct 16 14:13 Binary\_tree.h

-rw-rw-r-- 1 gp012 gp012 14 Oct 16 14:13 del1.txt

-rw-rw-r-- 1 gp012 gp012 20 Oct 16 14:13 del2.txt

-rw-rw-r-- 1 gp012 gp012 36 Oct 16 14:13 del3.txt

-rw-rw-r-- 1 gp012 gp012 43 Oct 16 14:13 del4.txt

-rw-rw-r-- 1 gp012 gp012 91 Oct 16 14:13 ins.txt

-rw-rw-r-- 1 gp012 gp012 2636 Oct 16 14:13 main.cpp

-rw-rw-r-- 1 gp012 gp012 162 Oct 20 23:22 makefile

-rw-rw-r-- 1 gp012 gp012 4314 Oct 16 14:13 Search\_tree.h

-rw-rw-r-- 1 gp012 gp012 270 Oct 16 14:13 utility.h

gp012@CS:~/PA3$ make

g++ -c main.cpp

g++ main.o -o avl

gp012@CS:~/PA3$ avl

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Menu:

1. Incremental Insert

2. Insert from File

3. Incremental Delete

4. Delete from File

p. Print tree

x. Exit

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

2

Enter Insertion File Name:

ins.txt

++++++++++++++++++++++

69: 29 77

29: 15 48

15: 5 23

5: 3 11

11: - 14

23: 16 26

16: - 18

48: 33 64

33: 32 46

64: 50 68

77: 72 84

72: 71 76

84: 80 89

80: 79 82

89: 87 93

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Menu:

1. Incremental Insert

2. Insert from File

3. Incremental Delete

4. Delete from File

p. Print tree

x. Exit

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

4

Enter Deletion File Name:

del1.txt

++++++++++++++++++++++

29: 15 69

15: 5 23

5: 3 11

11: - 14

23: 16 26

16: - 18

69: 48 84

48: 33 64

33: 32 46

64: 50 68

84: 77 89

77: 72 80

89: 87 93

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Menu:

1. Incremental Insert

2. Insert from File

3. Incremental Delete

4. Delete from File

p. Print tree

x. Exit

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

4

Enter Deletion File Name:

del2.txt

error, no left node

error, no right node

error, no left node

error, no right node

++++++++++++++++++++++

32: 15 69

15: 5 18

5: 3 11

11: - 14

18: 16 -

69: 48 84

48: 33 64

33: - 46

64: 50 68

84: 77 89

77: 72 80

89: 87 93

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Menu:

1. Incremental Insert

2. Insert from File

3. Incremental Delete

4. Delete from File

p. Print tree

x. Exit

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

4

Enter Deletion File Name:

del3.txt

error, no left node

error, no right node

error, no left node

error, no right node

error, no right node

error, no right node

error, no right node

error, no right node

++++++++++++++++++++++

32: 15 69

15: 5 18

5: 3 11

18: 16 -

69: 48 84

48: 33 64

33: - 46

64: 50 68

84: 77 89

++++++++++++++++++++++

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Menu:

1. Incremental Insert

2. Insert from File

3. Incremental Delete

4. Delete from File

p. Print tree

x. Exit

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

4

Enter Deletion File Name:

del4.txt

error, no left node

error, no left node

error, no right node

error, no right node

error, no right node

error, no right node

error, no right node

error, no right node

error, no left node

error, no right node

error, no left node

error, no right node

error, no left node

++++++++++++++++++++++

48: 32 69

32: 16 33

16: 15 18

33: - 46

69: 64 84

64: 50 68

84: 77 89

++++++++++++++++++++++

|  |  |  |
| --- | --- | --- |
|  | Yes | No |
| Screen shots of ls -al and compile |  |  |
| Working makefile submission |  |  |
| No compile error on the CS server |  |  |
| Completion of rotate\_right |  |  |
| Completion of left\_balance |  |  |
| Completion of avl\_delete |  |  |
| 4 screen shots of testing |  |  |
| Correct result of (ins.txt, del1.txt) |  |  |
| Correct result of (ins.txt, del2.txt) |  |  |
| Correct result of (ins.txt, del3.txt) |  |  |
| Correct result of (ins.txt, del4.txt) |  |  |