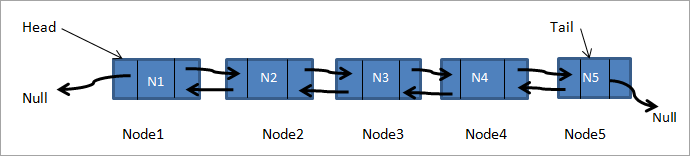
PFII Lab 8: Linked Lists II

In this lab I learned about doubly linked lists, expanding on previous basic linked list knowledge. By modifying previous lab code to create a doubly linked list, I found more uses of the -> operator, which previously let us point the next node or an element at a node, like *-> prev*, which points to the previous node in the doubly linked list. In this lab, using the previously known operator and node concepts, we altered a list by reversing lists and adding/deleting nodes (location could be the end, beginning, or any distance **k** from a reference). The usage of the -> operator and pointer comparison in conditionals was greatly increased in this lab compared the Lab7. This was most prevalent in Task 6 (assign a pointer to the value in the list at a distance **k** previous to the tail) and Task 7 (delete the value at temp) because we had to account for cases where the pointer or operations were out of bounds. Overall, this continuation of the previous lab delved deeper into linked list application and the creation of doubly linked lists, providing a good background for future linked list development.



**Program Output:**

Node 0 Elem: 0 Address: 0x770c20 Next Address: 0x770c40 Prev Address: 0

Node 1 Elem: 1 Address: 0x770c40 Next Address: 0x770c60 Prev Address: 0x770c20

Node 2 Elem: 2 Address: 0x770c60 Next Address: 0x770c80 Prev Address: 0x770c40

Node 3 Elem: 3 Address: 0x770c80 Next Address: 0x770ca0 Prev Address: 0x770c60

Node 4 Elem: 4 Address: 0x770ca0 Next Address: 0x770cc0 Prev Address: 0x770c80

Node 5 Elem: 5 Address: 0x770cc0 Next Address: 0x770ce0 Prev Address: 0x770ca0

Node 6 Elem: 6 Address: 0x770ce0 Next Address: 0x770d00 Prev Address: 0x770cc0

Node 7 Elem: 7 Address: 0x770d00 Next Address: 0x770d20 Prev Address: 0x770ce0

Node 8 Elem: 8 Address: 0x770d20 Next Address: 0x770d40 Prev Address: 0x770d00

Node 9 Elem: 9 Address: 0x770d40 Next Address: 0x770d60 Prev Address: 0x770d20

Node 10 Elem: 10 Address: 0x770d60 Next Address: 0x770d80 Prev Address: 0x770d40

Node 11 Elem: 11 Address: 0x770d80 Next Address: 0x770da0 Prev Address: 0x770d60

Node 12 Elem: 12 Address: 0x770da0 Next Address: 0x770dc0 Prev Address: 0x770d80

Node 13 Elem: 13 Address: 0x770dc0 Next Address: 0x770de0 Prev Address: 0x770da0

Node 14 Elem: 14 Address: 0x770de0 Next Address: 0x770e00 Prev Address: 0x770dc0

Node 15 Elem: 15 Address: 0x770e00 Next Address: 0 Prev Address: 0x770de0

------------------------------------------------------------------------------------------

Node 0 Elem: 15 Address: 0x770e00 Next Address: 0 Prev Address: 0x770de0

Node 1 Elem: 14 Address: 0x770de0 Next Address: 0x770e00 Prev Address: 0x770dc0

Node 2 Elem: 13 Address: 0x770dc0 Next Address: 0x770de0 Prev Address: 0x770da0

Node 3 Elem: 12 Address: 0x770da0 Next Address: 0x770dc0 Prev Address: 0x770d80

Node 4 Elem: 11 Address: 0x770d80 Next Address: 0x770da0 Prev Address: 0x770d60

Node 5 Elem: 10 Address: 0x770d60 Next Address: 0x770d80 Prev Address: 0x770d40

Node 6 Elem: 9 Address: 0x770d40 Next Address: 0x770d60 Prev Address: 0x770d20

Node 7 Elem: 8 Address: 0x770d20 Next Address: 0x770d40 Prev Address: 0x770d00

Node 8 Elem: 7 Address: 0x770d00 Next Address: 0x770d20 Prev Address: 0x770ce0

Node 9 Elem: 6 Address: 0x770ce0 Next Address: 0x770d00 Prev Address: 0x770cc0

Node 10 Elem: 5 Address: 0x770cc0 Next Address: 0x770ce0 Prev Address: 0x770ca0

Node 11 Elem: 4 Address: 0x770ca0 Next Address: 0x770cc0 Prev Address: 0x770c80

Node 12 Elem: 3 Address: 0x770c80 Next Address: 0x770ca0 Prev Address: 0x770c60

Node 13 Elem: 2 Address: 0x770c60 Next Address: 0x770c80 Prev Address: 0x770c40

Node 14 Elem: 1 Address: 0x770c40 Next Address: 0x770c60 Prev Address: 0x770c20

Node 15 Elem: 0 Address: 0x770c20 Next Address: 0x770c40 Prev Address: 0

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TASK #2:

Node 0 Elem: 100 Address: 0x770e20 Next Address: 0x770c20 Prev Address: 0

Node 1 Elem: 0 Address: 0x770c20 Next Address: 0x770c40 Prev Address: 0x770e20

Node 2 Elem: 1 Address: 0x770c40 Next Address: 0x770c60 Prev Address: 0x770c20

Node 3 Elem: 2 Address: 0x770c60 Next Address: 0x770c80 Prev Address: 0x770c40

Node 4 Elem: 3 Address: 0x770c80 Next Address: 0x770ca0 Prev Address: 0x770c60

Node 5 Elem: 4 Address: 0x770ca0 Next Address: 0x770cc0 Prev Address: 0x770c80

Node 6 Elem: 5 Address: 0x770cc0 Next Address: 0x770ce0 Prev Address: 0x770ca0

Node 7 Elem: 6 Address: 0x770ce0 Next Address: 0x770d00 Prev Address: 0x770cc0

Node 8 Elem: 7 Address: 0x770d00 Next Address: 0x770d20 Prev Address: 0x770ce0

Node 9 Elem: 8 Address: 0x770d20 Next Address: 0x770d40 Prev Address: 0x770d00

Node 10 Elem: 9 Address: 0x770d40 Next Address: 0x770d60 Prev Address: 0x770d20

Node 11 Elem: 10 Address: 0x770d60 Next Address: 0x770d80 Prev Address: 0x770d40

Node 12 Elem: 11 Address: 0x770d80 Next Address: 0x770da0 Prev Address: 0x770d60

Node 13 Elem: 12 Address: 0x770da0 Next Address: 0x770dc0 Prev Address: 0x770d80

Node 14 Elem: 13 Address: 0x770dc0 Next Address: 0x770de0 Prev Address: 0x770da0

Node 15 Elem: 14 Address: 0x770de0 Next Address: 0x770e00 Prev Address: 0x770dc0

Node 16 Elem: 15 Address: 0x770e00 Next Address: 0 Prev Address: 0x770de0

------------------------------------------------------------------------------------------

Node 0 Elem: 15 Address: 0x770e00 Next Address: 0 Prev Address: 0x770de0

Node 1 Elem: 14 Address: 0x770de0 Next Address: 0x770e00 Prev Address: 0x770dc0

Node 2 Elem: 13 Address: 0x770dc0 Next Address: 0x770de0 Prev Address: 0x770da0

Node 3 Elem: 12 Address: 0x770da0 Next Address: 0x770dc0 Prev Address: 0x770d80

Node 4 Elem: 11 Address: 0x770d80 Next Address: 0x770da0 Prev Address: 0x770d60

Node 5 Elem: 10 Address: 0x770d60 Next Address: 0x770d80 Prev Address: 0x770d40

Node 6 Elem: 9 Address: 0x770d40 Next Address: 0x770d60 Prev Address: 0x770d20

Node 7 Elem: 8 Address: 0x770d20 Next Address: 0x770d40 Prev Address: 0x770d00

Node 8 Elem: 7 Address: 0x770d00 Next Address: 0x770d20 Prev Address: 0x770ce0

Node 9 Elem: 6 Address: 0x770ce0 Next Address: 0x770d00 Prev Address: 0x770cc0

Node 10 Elem: 5 Address: 0x770cc0 Next Address: 0x770ce0 Prev Address: 0x770ca0

Node 11 Elem: 4 Address: 0x770ca0 Next Address: 0x770cc0 Prev Address: 0x770c80

Node 12 Elem: 3 Address: 0x770c80 Next Address: 0x770ca0 Prev Address: 0x770c60

Node 13 Elem: 2 Address: 0x770c60 Next Address: 0x770c80 Prev Address: 0x770c40

Node 14 Elem: 1 Address: 0x770c40 Next Address: 0x770c60 Prev Address: 0x770c20

Node 15 Elem: 0 Address: 0x770c20 Next Address: 0x770c40 Prev Address: 0x770e20

Node 16 Elem: 100 Address: 0x770e20 Next Address: 0x770c20 Prev Address: 0

------------------------------------------------------------------------------------------

TASK #3:

Node 0 Elem: 100 Address: 0x770e20 Next Address: 0x770c20 Prev Address: 0

Node 1 Elem: 0 Address: 0x770c20 Next Address: 0x770c40 Prev Address: 0x770e20

Node 2 Elem: 1 Address: 0x770c40 Next Address: 0x770c60 Prev Address: 0x770c20

Node 3 Elem: 2 Address: 0x770c60 Next Address: 0x770c80 Prev Address: 0x770c40

Node 4 Elem: 3 Address: 0x770c80 Next Address: 0x770ca0 Prev Address: 0x770c60

Node 5 Elem: 4 Address: 0x770ca0 Next Address: 0x770cc0 Prev Address: 0x770c80

Node 6 Elem: 5 Address: 0x770cc0 Next Address: 0x770ce0 Prev Address: 0x770ca0

Node 7 Elem: 6 Address: 0x770ce0 Next Address: 0x770d00 Prev Address: 0x770cc0

Node 8 Elem: 7 Address: 0x770d00 Next Address: 0x770d20 Prev Address: 0x770ce0

Node 9 Elem: 8 Address: 0x770d20 Next Address: 0x770d40 Prev Address: 0x770d00

Node 10 Elem: 9 Address: 0x770d40 Next Address: 0x770d60 Prev Address: 0x770d20

Node 11 Elem: 10 Address: 0x770d60 Next Address: 0x770d80 Prev Address: 0x770d40

Node 12 Elem: 11 Address: 0x770d80 Next Address: 0x770da0 Prev Address: 0x770d60

Node 13 Elem: 12 Address: 0x770da0 Next Address: 0x770dc0 Prev Address: 0x770d80

Node 14 Elem: 13 Address: 0x770dc0 Next Address: 0x770de0 Prev Address: 0x770da0

Node 15 Elem: 14 Address: 0x770de0 Next Address: 0x770e00 Prev Address: 0x770dc0

Node 16 Elem: 15 Address: 0x770e00 Next Address: 0x770e40 Prev Address: 0x770de0

Node 17 Elem: -99 Address: 0x770e40 Next Address: 0 Prev Address: 0x770e00

------------------------------------------------------------------------------------------

Node 0 Elem: -99 Address: 0x770e40 Next Address: 0 Prev Address: 0x770e00

Node 1 Elem: 15 Address: 0x770e00 Next Address: 0x770e40 Prev Address: 0x770de0

Node 2 Elem: 14 Address: 0x770de0 Next Address: 0x770e00 Prev Address: 0x770dc0

Node 3 Elem: 13 Address: 0x770dc0 Next Address: 0x770de0 Prev Address: 0x770da0

Node 4 Elem: 12 Address: 0x770da0 Next Address: 0x770dc0 Prev Address: 0x770d80

Node 5 Elem: 11 Address: 0x770d80 Next Address: 0x770da0 Prev Address: 0x770d60

Node 6 Elem: 10 Address: 0x770d60 Next Address: 0x770d80 Prev Address: 0x770d40

Node 7 Elem: 9 Address: 0x770d40 Next Address: 0x770d60 Prev Address: 0x770d20

Node 8 Elem: 8 Address: 0x770d20 Next Address: 0x770d40 Prev Address: 0x770d00

Node 9 Elem: 7 Address: 0x770d00 Next Address: 0x770d20 Prev Address: 0x770ce0

Node 10 Elem: 6 Address: 0x770ce0 Next Address: 0x770d00 Prev Address: 0x770cc0

Node 11 Elem: 5 Address: 0x770cc0 Next Address: 0x770ce0 Prev Address: 0x770ca0

Node 12 Elem: 4 Address: 0x770ca0 Next Address: 0x770cc0 Prev Address: 0x770c80

Node 13 Elem: 3 Address: 0x770c80 Next Address: 0x770ca0 Prev Address: 0x770c60

Node 14 Elem: 2 Address: 0x770c60 Next Address: 0x770c80 Prev Address: 0x770c40

Node 15 Elem: 1 Address: 0x770c40 Next Address: 0x770c60 Prev Address: 0x770c20

Node 16 Elem: 0 Address: 0x770c20 Next Address: 0x770c40 Prev Address: 0x770e20

Node 17 Elem: 100 Address: 0x770e20 Next Address: 0x770c20 Prev Address: 0

------------------------------------------------------------------------------------------

TASK #4:

Node 0 Elem: 0 Address: 0x770c20 Next Address: 0x770c40 Prev Address: 0

Node 1 Elem: 1 Address: 0x770c40 Next Address: 0x770c60 Prev Address: 0x770c20

Node 2 Elem: 2 Address: 0x770c60 Next Address: 0x770c80 Prev Address: 0x770c40

Node 3 Elem: 3 Address: 0x770c80 Next Address: 0x770ca0 Prev Address: 0x770c60

Node 4 Elem: 4 Address: 0x770ca0 Next Address: 0x770cc0 Prev Address: 0x770c80

Node 5 Elem: 5 Address: 0x770cc0 Next Address: 0x770ce0 Prev Address: 0x770ca0

Node 6 Elem: 6 Address: 0x770ce0 Next Address: 0x770d00 Prev Address: 0x770cc0

Node 7 Elem: 7 Address: 0x770d00 Next Address: 0x770d20 Prev Address: 0x770ce0

Node 8 Elem: 8 Address: 0x770d20 Next Address: 0x770d40 Prev Address: 0x770d00

Node 9 Elem: 9 Address: 0x770d40 Next Address: 0x770d60 Prev Address: 0x770d20

Node 10 Elem: 10 Address: 0x770d60 Next Address: 0x770d80 Prev Address: 0x770d40

Node 11 Elem: 11 Address: 0x770d80 Next Address: 0x770da0 Prev Address: 0x770d60

Node 12 Elem: 12 Address: 0x770da0 Next Address: 0x770dc0 Prev Address: 0x770d80

Node 13 Elem: 13 Address: 0x770dc0 Next Address: 0x770de0 Prev Address: 0x770da0

Node 14 Elem: 14 Address: 0x770de0 Next Address: 0x770e00 Prev Address: 0x770dc0

Node 15 Elem: 15 Address: 0x770e00 Next Address: 0x770e40 Prev Address: 0x770de0

Node 16 Elem: -99 Address: 0x770e40 Next Address: 0 Prev Address: 0x770e00

------------------------------------------------------------------------------------------

Node 0 Elem: -99 Address: 0x770e40 Next Address: 0 Prev Address: 0x770e00

Node 1 Elem: 15 Address: 0x770e00 Next Address: 0x770e40 Prev Address: 0x770de0

Node 2 Elem: 14 Address: 0x770de0 Next Address: 0x770e00 Prev Address: 0x770dc0

Node 3 Elem: 13 Address: 0x770dc0 Next Address: 0x770de0 Prev Address: 0x770da0

Node 4 Elem: 12 Address: 0x770da0 Next Address: 0x770dc0 Prev Address: 0x770d80

Node 5 Elem: 11 Address: 0x770d80 Next Address: 0x770da0 Prev Address: 0x770d60

Node 6 Elem: 10 Address: 0x770d60 Next Address: 0x770d80 Prev Address: 0x770d40

Node 7 Elem: 9 Address: 0x770d40 Next Address: 0x770d60 Prev Address: 0x770d20

Node 8 Elem: 8 Address: 0x770d20 Next Address: 0x770d40 Prev Address: 0x770d00

Node 9 Elem: 7 Address: 0x770d00 Next Address: 0x770d20 Prev Address: 0x770ce0

Node 10 Elem: 6 Address: 0x770ce0 Next Address: 0x770d00 Prev Address: 0x770cc0

Node 11 Elem: 5 Address: 0x770cc0 Next Address: 0x770ce0 Prev Address: 0x770ca0

Node 12 Elem: 4 Address: 0x770ca0 Next Address: 0x770cc0 Prev Address: 0x770c80

Node 13 Elem: 3 Address: 0x770c80 Next Address: 0x770ca0 Prev Address: 0x770c60

Node 14 Elem: 2 Address: 0x770c60 Next Address: 0x770c80 Prev Address: 0x770c40

Node 15 Elem: 1 Address: 0x770c40 Next Address: 0x770c60 Prev Address: 0x770c20

Node 16 Elem: 0 Address: 0x770c20 Next Address: 0x770c40 Prev Address: 0

------------------------------------------------------------------------------------------

TASK #5:

Node 0 Elem: 0 Address: 0x770c20 Next Address: 0x770c40 Prev Address: 0

Node 1 Elem: 1 Address: 0x770c40 Next Address: 0x770c60 Prev Address: 0x770c20

Node 2 Elem: 2 Address: 0x770c60 Next Address: 0x770c80 Prev Address: 0x770c40

Node 3 Elem: 3 Address: 0x770c80 Next Address: 0x770ca0 Prev Address: 0x770c60

Node 4 Elem: 4 Address: 0x770ca0 Next Address: 0x770cc0 Prev Address: 0x770c80

Node 5 Elem: 5 Address: 0x770cc0 Next Address: 0x770ce0 Prev Address: 0x770ca0

Node 6 Elem: 6 Address: 0x770ce0 Next Address: 0x770d00 Prev Address: 0x770cc0

Node 7 Elem: 7 Address: 0x770d00 Next Address: 0x770d20 Prev Address: 0x770ce0

Node 8 Elem: 8 Address: 0x770d20 Next Address: 0x770d40 Prev Address: 0x770d00

Node 9 Elem: 9 Address: 0x770d40 Next Address: 0x770d60 Prev Address: 0x770d20

Node 10 Elem: 10 Address: 0x770d60 Next Address: 0x770d80 Prev Address: 0x770d40

Node 11 Elem: 11 Address: 0x770d80 Next Address: 0x770da0 Prev Address: 0x770d60

Node 12 Elem: 12 Address: 0x770da0 Next Address: 0x770dc0 Prev Address: 0x770d80

Node 13 Elem: 13 Address: 0x770dc0 Next Address: 0x770de0 Prev Address: 0x770da0

Node 14 Elem: 14 Address: 0x770de0 Next Address: 0x770e00 Prev Address: 0x770dc0

Node 15 Elem: 15 Address: 0x770e00 Next Address: 0 Prev Address: 0x770de0

------------------------------------------------------------------------------------------

Node 0 Elem: 15 Address: 0x770e00 Next Address: 0 Prev Address: 0x770de0

Node 1 Elem: 14 Address: 0x770de0 Next Address: 0x770e00 Prev Address: 0x770dc0

Node 2 Elem: 13 Address: 0x770dc0 Next Address: 0x770de0 Prev Address: 0x770da0

Node 3 Elem: 12 Address: 0x770da0 Next Address: 0x770dc0 Prev Address: 0x770d80

Node 4 Elem: 11 Address: 0x770d80 Next Address: 0x770da0 Prev Address: 0x770d60

Node 5 Elem: 10 Address: 0x770d60 Next Address: 0x770d80 Prev Address: 0x770d40

Node 6 Elem: 9 Address: 0x770d40 Next Address: 0x770d60 Prev Address: 0x770d20

Node 7 Elem: 8 Address: 0x770d20 Next Address: 0x770d40 Prev Address: 0x770d00

Node 8 Elem: 7 Address: 0x770d00 Next Address: 0x770d20 Prev Address: 0x770ce0

Node 9 Elem: 6 Address: 0x770ce0 Next Address: 0x770d00 Prev Address: 0x770cc0

Node 10 Elem: 5 Address: 0x770cc0 Next Address: 0x770ce0 Prev Address: 0x770ca0

Node 11 Elem: 4 Address: 0x770ca0 Next Address: 0x770cc0 Prev Address: 0x770c80

Node 12 Elem: 3 Address: 0x770c80 Next Address: 0x770ca0 Prev Address: 0x770c60

Node 13 Elem: 2 Address: 0x770c60 Next Address: 0x770c80 Prev Address: 0x770c40

Node 14 Elem: 1 Address: 0x770c40 Next Address: 0x770c60 Prev Address: 0x770c20

Node 15 Elem: 0 Address: 0x770c20 Next Address: 0x770c40 Prev Address: 0

------------------------------------------------------------------------------------------

TASK #6:

Node 0 Elem: 0 Address: 0x770c20 Next Address: 0x770c40 Prev Address: 0

Node 1 Elem: 1 Address: 0x770c40 Next Address: 0x770c60 Prev Address: 0x770c20

Node 2 Elem: 2 Address: 0x770c60 Next Address: 0x770c80 Prev Address: 0x770c40

Node 3 Elem: 3 Address: 0x770c80 Next Address: 0x770ca0 Prev Address: 0x770c60

Node 4 Elem: 4 Address: 0x770ca0 Next Address: 0x770cc0 Prev Address: 0x770c80

Node 5 Elem: 5 Address: 0x770cc0 Next Address: 0x770ce0 Prev Address: 0x770ca0

Node 6 Elem: 6 Address: 0x770ce0 Next Address: 0x770d00 Prev Address: 0x770cc0

Node 7 Elem: 7 Address: 0x770d00 Next Address: 0x770d20 Prev Address: 0x770ce0

Node 8 Elem: 8 Address: 0x770d20 Next Address: 0x770d40 Prev Address: 0x770d00

Node 9 Elem: 9 Address: 0x770d40 Next Address: 0x770d60 Prev Address: 0x770d20

Node 10 Elem: 10 Address: 0x770d60 Next Address: 0x770d80 Prev Address: 0x770d40

Node 11 Elem: 11 Address: 0x770d80 Next Address: 0x770da0 Prev Address: 0x770d60

Node 12 Elem: 12 Address: 0x770da0 Next Address: 0x770dc0 Prev Address: 0x770d80

Node 13 Elem: 13 Address: 0x770dc0 Next Address: 0x770de0 Prev Address: 0x770da0

Node 14 Elem: 14 Address: 0x770de0 Next Address: 0x770e00 Prev Address: 0x770dc0

Node 15 Elem: 15 Address: 0x770e00 Next Address: 0 Prev Address: 0x770de0

------------------------------------------------------------------------------------------

Node 0 Elem: 15 Address: 0x770e00 Next Address: 0 Prev Address: 0x770de0

Node 1 Elem: 14 Address: 0x770de0 Next Address: 0x770e00 Prev Address: 0x770dc0

Node 2 Elem: 13 Address: 0x770dc0 Next Address: 0x770de0 Prev Address: 0x770da0

Node 3 Elem: 12 Address: 0x770da0 Next Address: 0x770dc0 Prev Address: 0x770d80

Node 4 Elem: 11 Address: 0x770d80 Next Address: 0x770da0 Prev Address: 0x770d60

Node 5 Elem: 10 Address: 0x770d60 Next Address: 0x770d80 Prev Address: 0x770d40

Node 6 Elem: 9 Address: 0x770d40 Next Address: 0x770d60 Prev Address: 0x770d20

Node 7 Elem: 8 Address: 0x770d20 Next Address: 0x770d40 Prev Address: 0x770d00

Node 8 Elem: 7 Address: 0x770d00 Next Address: 0x770d20 Prev Address: 0x770ce0

Node 9 Elem: 6 Address: 0x770ce0 Next Address: 0x770d00 Prev Address: 0x770cc0

Node 10 Elem: 5 Address: 0x770cc0 Next Address: 0x770ce0 Prev Address: 0x770ca0

Node 11 Elem: 4 Address: 0x770ca0 Next Address: 0x770cc0 Prev Address: 0x770c80

Node 12 Elem: 3 Address: 0x770c80 Next Address: 0x770ca0 Prev Address: 0x770c60

Node 13 Elem: 2 Address: 0x770c60 Next Address: 0x770c80 Prev Address: 0x770c40

Node 14 Elem: 1 Address: 0x770c40 Next Address: 0x770c60 Prev Address: 0x770c20

Node 15 Elem: 0 Address: 0x770c20 Next Address: 0x770c40 Prev Address: 0

------------------------------------------------------------------------------------------

TASK #7:

Node 0 Elem: 0 Address: 0x770c20 Next Address: 0x770c40 Prev Address: 0

Node 1 Elem: 1 Address: 0x770c40 Next Address: 0x770c60 Prev Address: 0x770c20

Node 2 Elem: 2 Address: 0x770c60 Next Address: 0x770c80 Prev Address: 0x770c40

Node 3 Elem: 3 Address: 0x770c80 Next Address: 0x770ca0 Prev Address: 0x770c60

Node 4 Elem: 4 Address: 0x770ca0 Next Address: 0x770cc0 Prev Address: 0x770c80

Node 5 Elem: 5 Address: 0x770cc0 Next Address: 0x770ce0 Prev Address: 0x770ca0

Node 6 Elem: 6 Address: 0x770ce0 Next Address: 0x770d00 Prev Address: 0x770cc0

Node 7 Elem: 7 Address: 0x770d00 Next Address: 0x770d20 Prev Address: 0x770ce0

Node 8 Elem: 8 Address: 0x770d20 Next Address: 0x770d40 Prev Address: 0x770d00

Node 9 Elem: 9 Address: 0x770d40 Next Address: 0x770d60 Prev Address: 0x770d20

Node 10 Elem: 10 Address: 0x770d60 Next Address: 0x770d80 Prev Address: 0x770d40

Node 11 Elem: 11 Address: 0x770d80 Next Address: 0x770dc0 Prev Address: 0x770d60

Node 12 Elem: 13 Address: 0x770dc0 Next Address: 0x770de0 Prev Address: 0x770d80

Node 13 Elem: 14 Address: 0x770de0 Next Address: 0x770e00 Prev Address: 0x770dc0

Node 14 Elem: 15 Address: 0x770e00 Next Address: 0 Prev Address: 0x770de0

------------------------------------------------------------------------------------------

Node 0 Elem: 15 Address: 0x770e00 Next Address: 0 Prev Address: 0x770de0

Node 1 Elem: 14 Address: 0x770de0 Next Address: 0x770e00 Prev Address: 0x770dc0

Node 2 Elem: 13 Address: 0x770dc0 Next Address: 0x770de0 Prev Address: 0x770d80

Node 3 Elem: 11 Address: 0x770d80 Next Address: 0x770dc0 Prev Address: 0x770d60

Node 4 Elem: 10 Address: 0x770d60 Next Address: 0x770d80 Prev Address: 0x770d40

Node 5 Elem: 9 Address: 0x770d40 Next Address: 0x770d60 Prev Address: 0x770d20

Node 6 Elem: 8 Address: 0x770d20 Next Address: 0x770d40 Prev Address: 0x770d00

Node 7 Elem: 7 Address: 0x770d00 Next Address: 0x770d20 Prev Address: 0x770ce0

Node 8 Elem: 6 Address: 0x770ce0 Next Address: 0x770d00 Prev Address: 0x770cc0

Node 9 Elem: 5 Address: 0x770cc0 Next Address: 0x770ce0 Prev Address: 0x770ca0

Node 10 Elem: 4 Address: 0x770ca0 Next Address: 0x770cc0 Prev Address: 0x770c80

Node 11 Elem: 3 Address: 0x770c80 Next Address: 0x770ca0 Prev Address: 0x770c60

Node 12 Elem: 2 Address: 0x770c60 Next Address: 0x770c80 Prev Address: 0x770c40

Node 13 Elem: 1 Address: 0x770c40 Next Address: 0x770c60 Prev Address: 0x770c20

Node 14 Elem: 0 Address: 0x770c20 Next Address: 0x770c40 Prev Address: 0

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