The Virtual Learning Environment for Computer Programming

Delete all occurrences of an element in a list

X15744_en

In the public_files section of the problem statement, a class called **PositionalList**, which implements the **Positional List ADT** using a doubly-linked list, is defined. Extend the implementation of this class with a new public method **delete_all(self, e)**. This method deletes all occurrences of element **e** in the list instance calling it.

For example, if **t** is an instance of the class PositionalList that represents the following *list*

```
1, 2, 3, 1, 1, 4, 1, 5, 6, 1
```

after executing the statement **t.delete_all(1)**, the object **t** will represent the *list*

```
2, 3, 4, 5, 6
```

In particular, you should add the following public method to the **PositionalList** class:

```
def delete_all(self, e):
    """ Deletes all occurrences of e in self. """
```

Sample input

```
10
1 2 3 1 1 4 1 5 6 1
1
```

Sample output

```
list t:

1, 2, 3, 1, 1, 4, 1, 5, 6, 1

1, 6, 5, 1, 4, 1, 1, 3, 2, 1

list after deletion t:

2, 3, 4, 5, 6

6, 5, 4, 3, 2
```

Problem information

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