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Batch Code: ANP-C6315

Lab Assignment – 10

Question 1: Create LinkedList objects and perform all operations by using all methods of the Collection interface.

Input:

```
import java.util.LinkedList;
```

```
import java.util.Collection;
```

```
import java.util.Iterator;
```

```
public class Main {
```

```
    public static void main(String[] args) {
```

```
        // Creating a LinkedList
```

```
        LinkedList<String> linkedList = new LinkedList<>();
```

```
        // Adding elements
```

```
        linkedList.add("Apple");
```

```
        linkedList.add("Banana");
```

```
        linkedList.add("Orange");
```

```
        // Displaying elements using Iterator
```

```
        System.out.println("Elements in the LinkedList:");
```

```
        Iterator<String> iterator = linkedList.iterator();
```

```
        while (iterator.hasNext()) {
```

```
            System.out.println(iterator.next());
```

```
}

// Size of the LinkedList

System.out.println("Size of the LinkedList: " + linkedList.size());

// Removing an element

linkedList.remove("Banana");

// Checking if an element is present

System.out.println("Is 'Banana' present? " + linkedList.contains("Banana"));

// Clearing the LinkedList

linkedList.clear();

// Checking if the LinkedList is empty

System.out.println("Is the LinkedList empty? " + linkedList.isEmpty());

}

}
```

Output:

Elements in the LinkedList:

Apple

Banana

Orange

Size of the LinkedList: 3

Is 'Banana' present? false

Is the LinkedList empty? true