

1. Write a Java code to implement **Thread safe LinkedList**
Include below methods in your class LinkedList

```
public void addAtPosition(int index, int element){  
}  
  
public void removeAtPosition(int index, int element){  
  
}  
  
public int getFirst() {  
}  
  
public int getLast() {  
}  
  
public int size(){  
}
```

2. **Traffic Light Controlled Intersection:**

There is an intersection of two roads. First road is road A where cars travel from North to South in direction 1 and from South to North in direction 2. Second road is road B where cars travel from West to East in direction 3 and from East to West in direction 4.

Refer this link : [\(1\) Traffic Light Controlled Intersection - LeetCode](#)