Odd-Even list

Input: 2 — 3 — 8 — 1 — 5 — 4 — 9 — null

Output: 3 — 1 — 5 — 9 — 2 — 8 — 4 — null
(3 — 1 — 5 — 9: odd; 2 — 8 — 4: even)

- Odd wale Agey, even wale pichey!
- Humne yeh O(n) aur Constant Space me manage krna hai!
- Agar koi even element na ho toh sirf Odd ki list banegi vice-versa!
- Humne Head aur tail ko bhi sahi se set krna hai!

FUNDA: this list me se remove first kro, fir check kro even ya odd, fir usko respectively even list ya Odd list me daaldo! (AddLast)

- Odd ki tail ka next point krega even ke head ko!
- this ka head humne Odd ke head pe hai!
- this ka tail humne even ke tail pe hai!
- this ka size humne odd, even dist ke size ka summation krdia!

```
public void OddEven(){
LinkedList odd = new LinkedList();
LinkedList even = new LinkedList();
while (this.size>0){
int val = this.getFirst();
this.removeFirst();
if( val%2 == 0){
      even.addLast(val);
}else{
   odd.addLast(val);
  }
}
if (odd.size>0 && even.size>0){
odd.tail.next = even.head;
this.head = odd.head;
this.tail = even.tail;
this.size = oddsize+evensize;
}
else if(odd.size>0){
  this.head = odd.head;
  this.tail = odd.tail;
  this.size = odd.size;
}
else if(even.size>0){
  this.head = even.head;
  this.tail = even.tail;
  this.size = even.size;
 }
}
}
```