**Add Operation - Doubly Linked List**

[Report Issue](https://github.com/LeetCode-Feedback/LeetCode-Feedback/issues)

If we want to insert a new node cur after an existing node prev, we can divide this process into two steps:

1. link cur with prev and next, where next is the original next node of prev;A diagram of a diagram

   AI-generated content may be incorrect.
2. re-link the prev and next with cur. A diagram of a diagram

   AI-generated content may be incorrect.

Similar to the singly linked list, both the time and the space complexity of the add operation are O(1).

*An Example*

A number on a white background

AI-generated content may be incorrect.

Let's add a new node 9 after the existing node 6:

1. link cur (node 9) with prev (node 6) and next (node 15)A diagram of a diagram

   AI-generated content may be incorrect.
2. re-link prev (node 6) and next (node 15) with cur (node 9)A diagram of a diagram

   AI-generated content may be incorrect.

What if we want to insert a new node at the beginning or at the end?