Insert a node into a sorted doubly linked list



Problem Statement

This challenge is part of a tutorial track by MyCodeSchool

You're given the pointer to the head node of a sorted doubly linked list and an integer to insert into the list. Create a node and insert it into the appropriate position in the list. The head node might be NULL to indicate that the list is empty.

Input Format

You have to complete the Node* SortedInsert(Node* head, int data) method which takes two arguments - the head of the sorted, doubly linked list and the value to insert. You should NOT read any input from stdin/console.

Output Format

Create a node with the given data and insert it into the given list, making sure that the new list is also sorted. Then return the head node of the updated list. Do NOT print anything to stdout/console.

Sample Input

```
NULL , data = 2
NULL <-- 2 <--> 4 <--> 6 --> NULL , data = 5
```

Sample Output

```
NULL <-- 2 --> NULL
NULL <-- 2 <--> 4 <--> 6 --> NULL
```

Explanation

- 1. We have an empty list, 2 is inserted.
- 2. Data 5 is inserted such as list remains sorted.