

LC-430

Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Page No. \_\_\_\_

#code:- [Flatten a multilevel doubly LL]

```
Node* Flatten (Node* head) {
```

```
    if (head == NULL) {
```

```
        return head;
```

```
    }
```

```
    Node* curr = head;
```

```
    while (curr != NULL) {
```

```
        if (curr->child != NULL) {
```

```
            // Flatten child nodes
```

```
            Node* next = curr->next;
```

```
            curr->next = Flatten (curr->child);
```

```
            curr->next->prev = curr;
```

```
            curr->child = NULL;
```

```
            // Find tail
```

```
            while (curr->next != NULL) {
```

```
                curr = curr->next;
```

```
            }
```

```
            // attach tail with next ptr.
```

```
            if (next != NULL) {
```

```
                curr->next = next;
```

```
                next->prev = curr;
```

```
            }
```

```
        }
```

```
        curr = curr->next;
```

```
    }  
    return head;
```

```
}
```