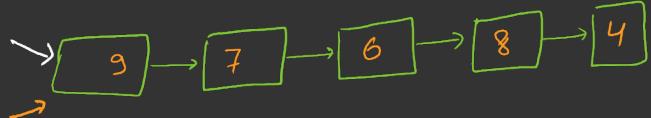


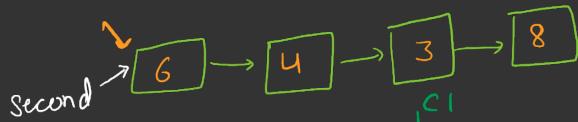
Add 2 Number

first

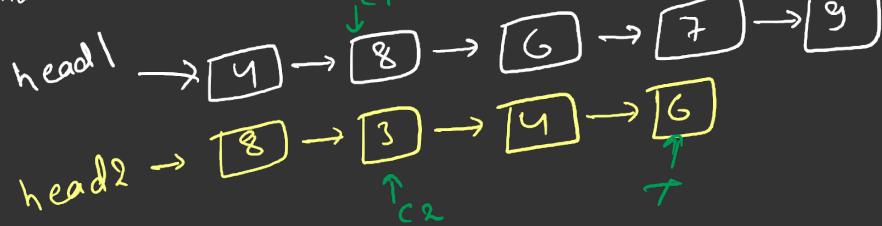


carry - 1

- ① Reverse both LL.
- ② Addition

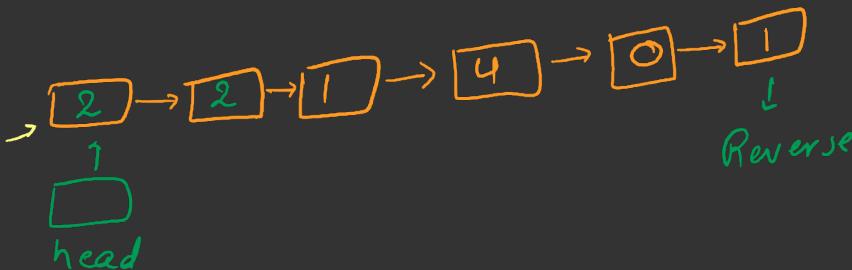


second



12

carry - 0 1




```
node *Reverse ( node *cur , node *prev ) {  
    if ( cur == NULL )  
        return prev;  
    node * front = cur->next ;  
    cur->next = prev ;  
    return Reverse ( front , cur );  
}
```



```
int main() {
    Node *first, *second;
    first = Reverse(first, NULL);
    second = Reverse(second, NULL);
    Node *C1 = first, *C2 = second;
    Node *head = new node(); int carry = 0;
    Node *tail = new node(0);
    while (C1 && C2) {
        int sum = C1->data + C2->data + carry;
        tail->next = new node(sum % 10);
        tail = tail->next;
        C1 = C1->next;
        C2 = C2->next;
        carry = sum / 10;
    }
}
```

```

while (c1) {
    int sum = c1->data + carry;
    Tail->next = new Node (sum%10);
    Tail = Tail->next;
    c1 = c1->next;
    carry = sum/10;
}

```

```

while (carry) {
    Tail->next = new Node (carry%10);
    carry /= 10;
}
head = Reverse (head->next, null);
return head;

```

```

while (c2) {
    int sum = c2->data + carry;
    Tail->next = new Node (sum%10);
    Tail = Tail->next;
    c2 = c2->next;
    carry = sum/10;
}

```