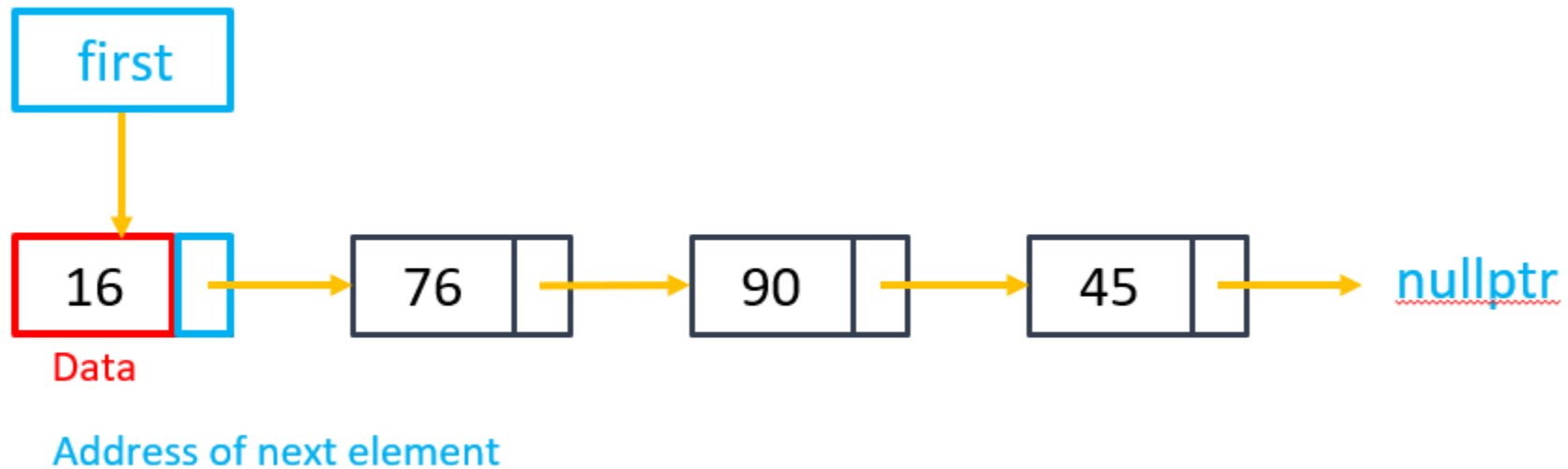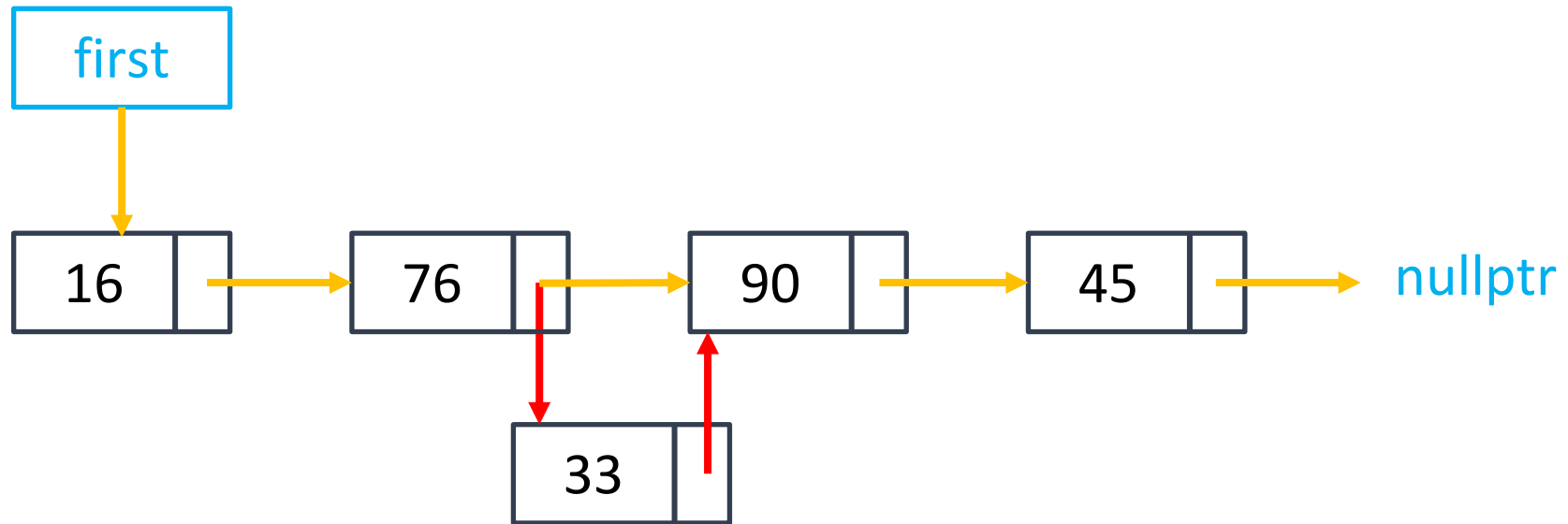# Week2 Exercise

Linked List

Insert

After Insert

Delete

first

16 → 76 → 90 → 45 → nullptr
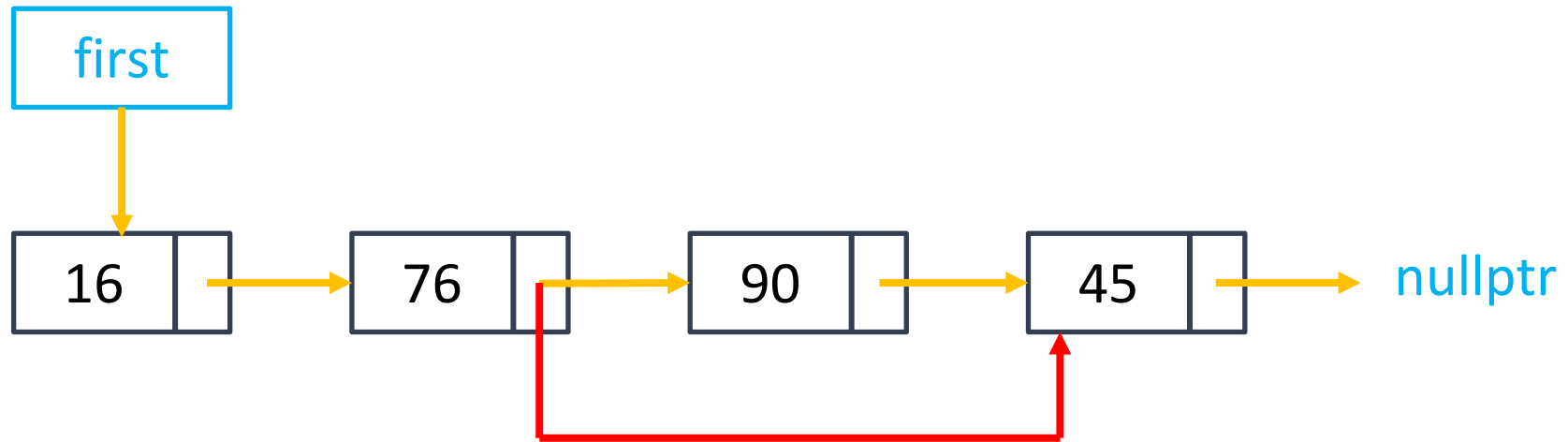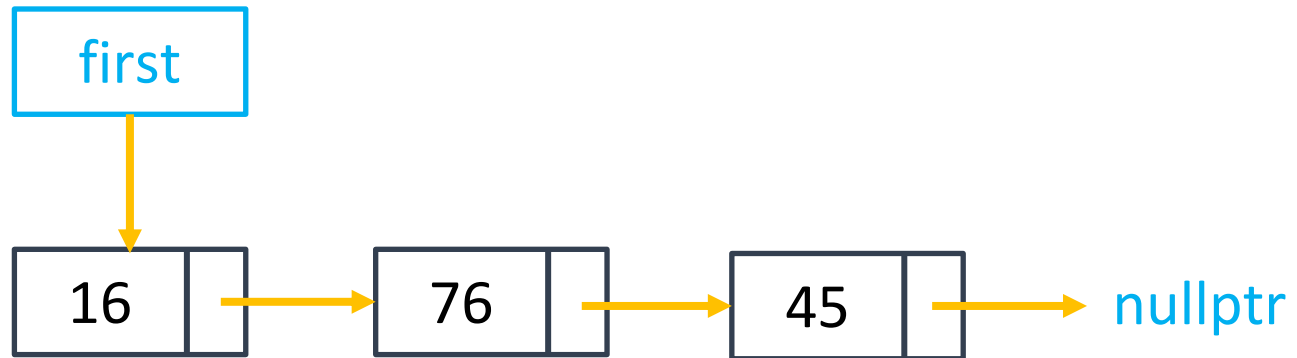
After Delete

first

16 → 76 → 45 → nullptr
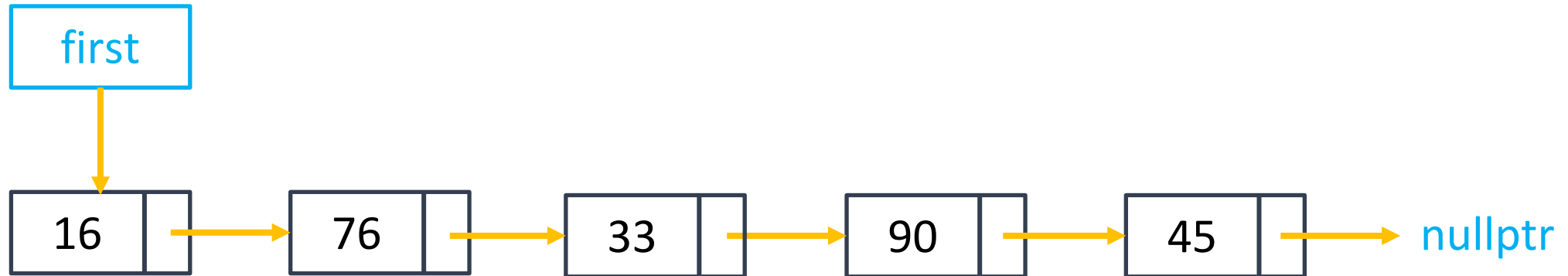
Exercise

Implement a Linked List

- Insert and Delete a node by value

- Print out the whole list

- Reverse the list

- Remove repeated numbers in the list (Hint: use set)

Input Format

Command	Description	Notes
b val	Insert value "val" at the beginning of the list	
e val	Insert value "val" at the end of the list	
p	Print out the list	
d val	Delete an element by value "val"	
r	Reverse the list	
c	Remove repeated numbers in the list	

```
b 3
b 2
b 1
e 4
e 4
e 5
e 5
e 6
e 6
p
r
p
c
p
```

Output Format and Verify

- Output

```
1 2 3 4 4 5 5 6 6
6 6 5 5 4 4 3 2 1
6 5 4 3 2 1
```

- Execute

./LL case<num>.txt   make
./gen_golden_ans case<num>.txt   make check_ans

  - If Error message appears <Permission Denied>
    - chmod +x gen_golden_ans