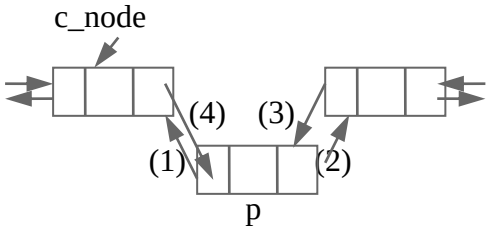
Lab7 Extended Doubly Linked List Exercise

* Menu 로 구성할 것 (Hw4 의 메뉴를 다음과 같이 수정하여 구현할 것)

(1. Insert, **2**.forward **3. Insert-After, 4. Insert_Before**, **5.find_Nth**)

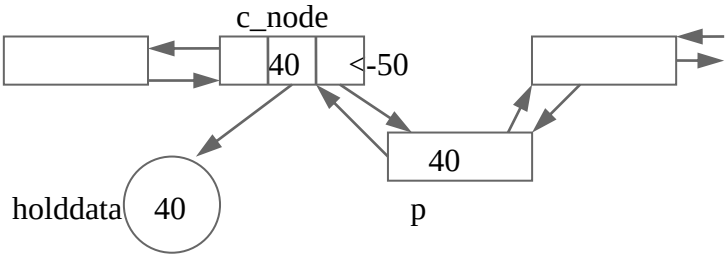
1) Insert_After (): //N 번째 노드의 다음에 Insert 함.

```
void insert_after ( c_node,     head) {
        ➔ find_nth(c_node);   // find current node position
       new Node(p);          p->data = newdata;
        if (head == NULL) { head = p;       p->Rlink=p;   p->Llink=p; }
        else {
            p ->Llink = c_node; (1)
            p->Rlink = c_node->Rlink; (2)
            c_node->Rlink->Llink = p; (3)
            c_node->Rlink = p;   (4)
         }
          c_node = p;
}
```



2) Insert_Before(): // N 번째 노드 이전에 Insert 함

```
void insert_before ( c_node,      head) {
    ➔ find_nth(c_node);   // find current node position
    if (head == NULL)   insert_after(newdata);
    else
      {   holddata = c_node->data;//ex.40       c_node->data = newdata;//ex.50
          insert_after(holddata);   c_node= c_node->Llink;
        }
     }
```



1) Find_nth (c_node)
   c_node= head;
   For (i=1; i<n; i++) c_node = c_node->rlink
   return c_node;

1. 테스트

1) Insert → 10
2) Insert → 20
3) Insert → 30
4) Forward→ 10, 20, 30
5) Insertafter (Nth=2)(data = 40)
6) Forward → 10, 20**,** **40** 30

7) Insertbefore (Nth= 3) (data = 50)
8) Forward →10, 20 **50** 40 30