

```
void del_first (struct tnode * *ps)
```

```
{
```

```
    struct tnode *temp;
```

```
    temp = *ps;
```

```
    if (*ps == NULL)
```

```
    {
        printf("List is empty");
    }
```

```
    return;
```

```
}
```

```
if ((temp->next) == temp)
```

```
{
    free(temp);
```

```
    *ps = NULL;
```

```
    return;
```

```
}
```

```
while (temp->next != temp)
```

```
{
```

```
    temp = temp->next;
```

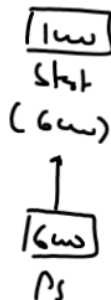
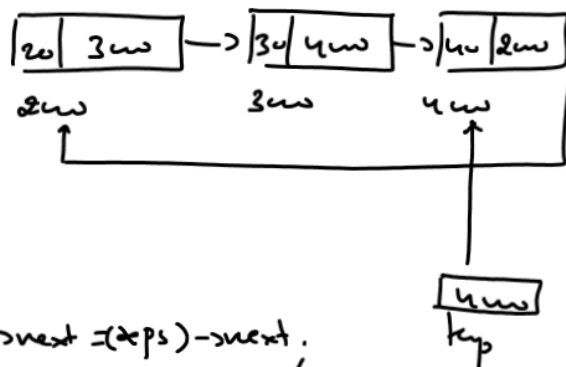
```
}
```

```
temp->next = (temp->next->next);
```

```
free(temp);
```

```
*ps = temp->next;
```

```
}
```



```
temp->next = (temp->next->next);
```

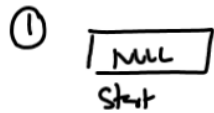
```
free(temp);
```

```
*ps = temp->next;
```

```
}
```

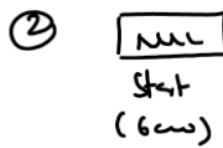
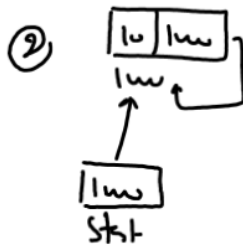
## Deleting Last Node of Circular Linked List

Before Del

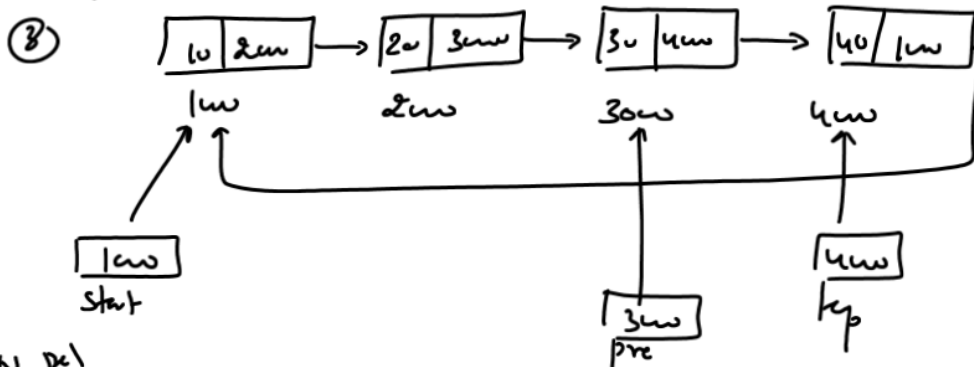


After Del

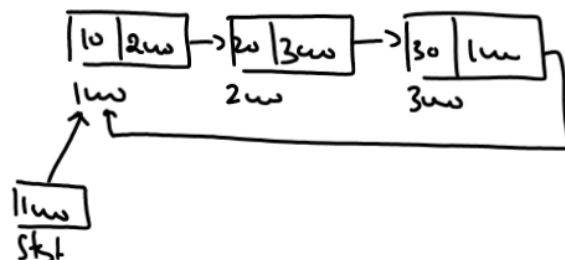
① List is empty



Before del



After Del



```
void del_last (struct tnode *xps)
```

```
{
```

```
    struct tnode *prev, *temp;
```

```
    temp = xps;
```

```
    if (xps == NULL)
```

```
    {
        printf("List is empty");
        return;
    }
```

```
    while (temp->next != xps)
```

```
    {
```

```
        prev = temp;
```

```
        temp = temp->next;
```

```
    }
```

```
    free(temp);
```

```
    prev->next = xps;
```

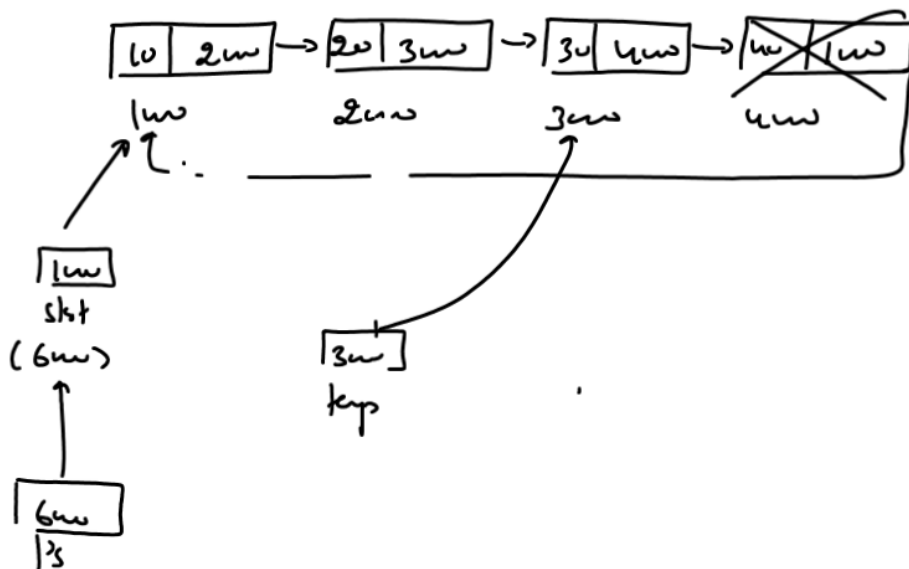
```
}
```

```
if (xps->next == xps)
```

```
{
    free(xps);
```

```
    xps = NULL;
```

```
    return;
}
```



## Solution 2

```
void del_last (struct cnode **ps)
{
    struct cnode *key;      temp = *ps;

    if (*ps == NULL)
    {
        printf("List is empty");
        return;
    }
    while (temp->next->next != *ps)
    {
        temp = temp->next;
    }
    free(temp->next);
    temp->next = *ps;
}

if ((*ps)->next == *ps)
{
    free(*ps);
    *ps = NULL;
    return;
}
```

## ASSIGNMENTS

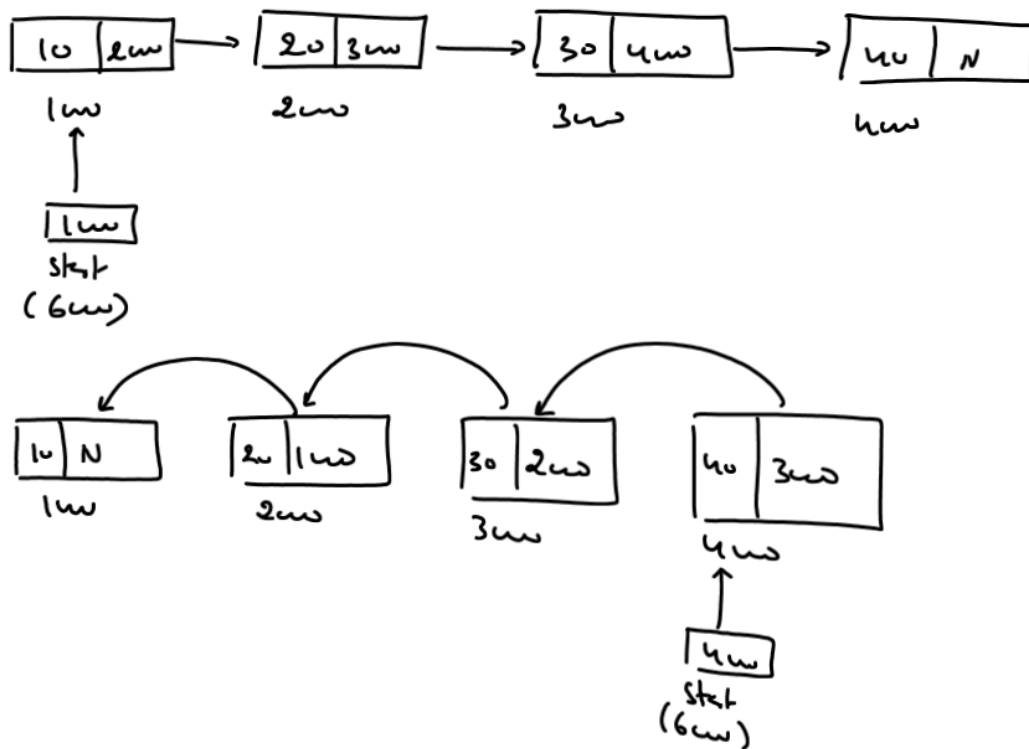
=====

Qn1. WAF called **del\_any()** which should accept an **int** as argument and deletes that node from **CIRCULAR LINKED LIST** whose data part matches with the argument passed.

Qn2. WAF called **insert()** which should add a new node in a CIRCULAR LINKED LIST in such a way that the list always remains sorted.

Qn3. WAF called **print\_reverse()** which displays a LINEAR LINKED LIST in reverse order.

Qn4. WAF called **reverse()** which REVERSES a LINEAR LINKED LIST



## Doubly Linked List

