


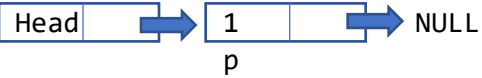
LinkedList-1 Diagram

```
LNode *create_LinkList(void) {}
```

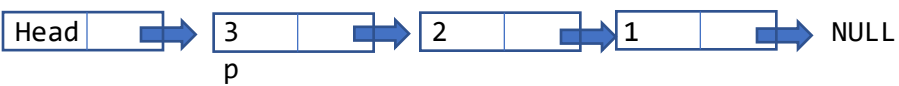
do while:

1) 



2) 


3) 


4) 


5) 


```
void printList(LNode* list) {}
```


while:

1) Head -> 4

list

2) Head -> 4 -> 3

list

3) Head -> 4 -> 3 -> 2

list


4) Head -> 4 -> 3 -> 2 -> 1

list

5) Head -> 4 -> 3 -> 2 -> 1 -> NULL

list

LinkedList-2 Diagram

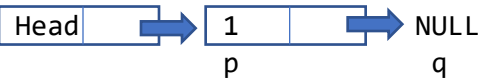
```
LNode *create_LinkList(void) {}
```

do while:

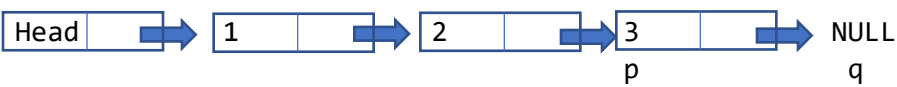
1) 





2) 


3) 


4) 


5) 


```
void printList(LNode* list) {}
```


while:

1) Head -> 1

list

2) Head -> 1 -> 2

list

3) Head -> 1 -> 2 -> 3

list


4) Head -> 1 -> 2 -> 3 -> 4

list

5) Head -> 1 -> 2 -> 3 -> 4 -> NULL

list

LinkedList-3 Diagram

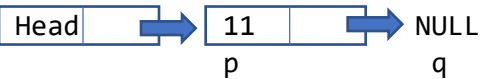
LNode *create_LinkList(void) {}

do while:

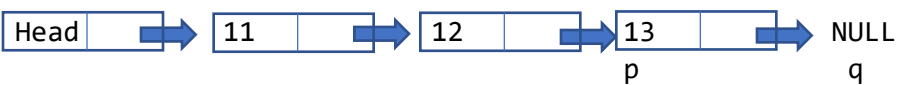
1) 






2) 

3) 


4) 

5) 



ElemType Get_Elem(LNode *L, int i) {}

while (p!=NULL && j<i):

1) 


2) 


if(j!=i) 


else { if(p==NULL) {} 
 else {} } 


void printList(LNode* list) {}

while:

1) Head -> 11


2) Head -> 11 -> 12 

3) Head -> 11 -> 12 -> 13


4) Head -> 11 -> 12 -> 13 -> 14


list

5) Head -> 11 -> 12 -> 13 -> 14 -> NULL
↓
list

LinkedList-4 Diagram

```
LNode *create_LinkList(void) {}
```

do while:

1) Head → NULL

p → NULL

q → NULL

2) Head → 11 → NULL
p q

3) Head → 11 → 12 → NULL
p q

4) Head → 11 → 12 → 13 → NULL
p q

5) Head → 11 → 12 → 13 → 14 → NULL
p q

```
void Locate_Node(LNode *L,int key) {}
```

while (p!=NULL && p->data!=key):

1) Head → 11 →
p && p!=13

2) Head → 11 → 12 →
p && p!=13

3) Head → 11 → 12 → 13 →
p && p==13





if(p==NULL) → p==13 → FALSE

else if(p->data==key) → p==13 && key==13 → TRUE

```
void printList(LNode* list) {}
```

while:

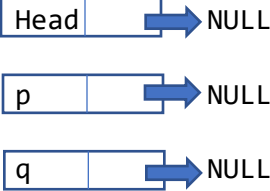
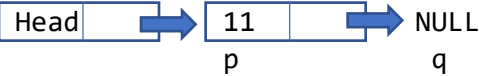

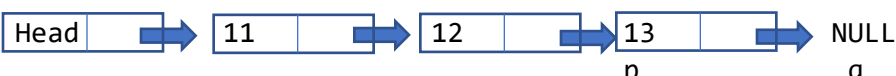

1) Head -> 11
↓
list

- 2) Head -> 11 -> 12

- 3) Head -> 11 -> 12 -> 13

- 4) Head -> 11 -> 12 -> 13 -> 14

- 5) Head -> 11 -> 12 -> 13 -> 14 -> NULL


LinkedList-5 Diagram

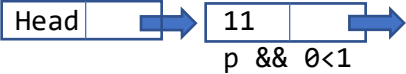

LNode *create_LinkList(void) {}

do while:

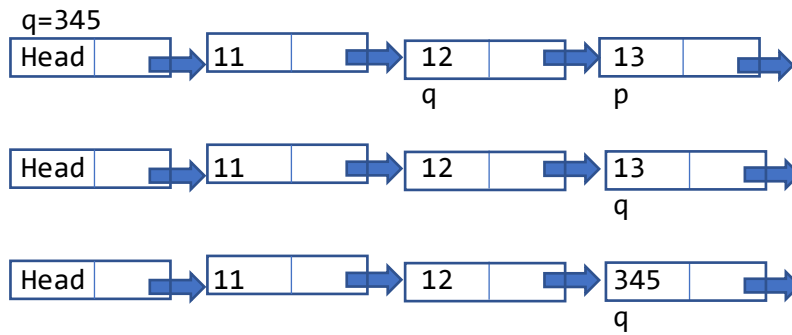
- 1) 
- 2) 
- 3) 
- 4) 
- 5) 

void Insert_LNode(LNode *L, int i, ElemType e) {}

while (p!=NULL && j<i-1):

- 1) 
 - 2) 
- if(p==NULL || j!=i-1) → p==12, 0!=(2-1) → FALSE

else



```
void printList(LNode* list) {}
```

while:

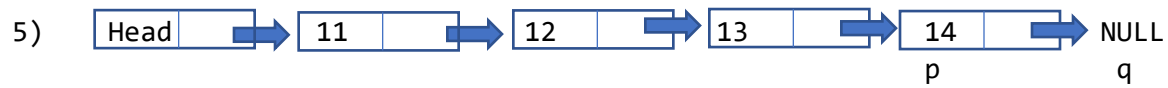
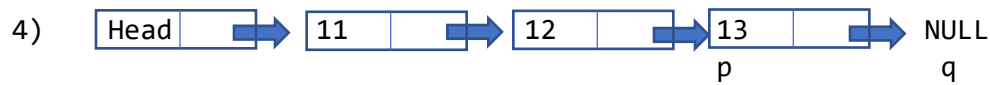
- 1) Head -> 11
↓
list
- 2) Head -> 11 -> 12
↓
list
- 3) Head -> 11 -> 12 -> 13
↓
list
- 4) Head -> 11 -> 12 -> 13 -> 14
↓
list
- 5) Head -> 11 -> 12 -> 13 -> 14 -> NULL
↓
list

LinkedList-6 Diagram

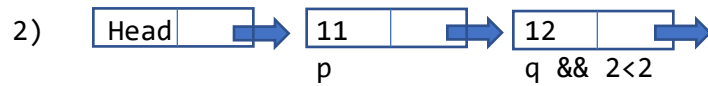
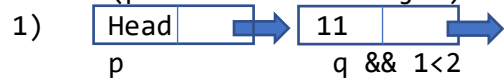
```
LNode *create_LinkList(void) {}
```

do while:

- 1) Head → NULL
p → NULL
q → NULL
- 2) Head → 11 → NULL
p → 11
- 3) Head → 11 → 12 → NULL
p → 11, q → 12



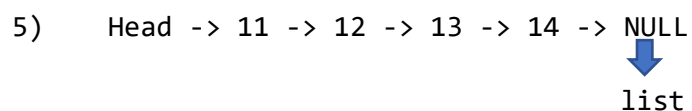
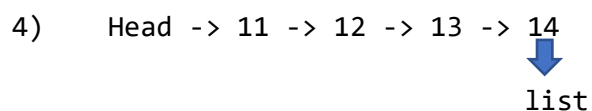
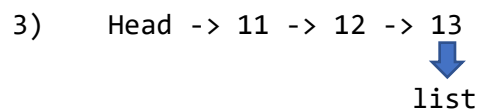
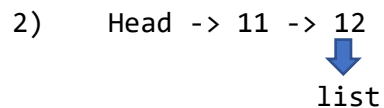
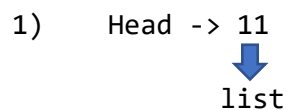
```
void Delete_LinkList(LNode *L, int i) {}
while (p->next!=NULL && j<i):
```



if(j!=i) $\rightarrow 2 \neq 2 \rightarrow \text{FALSE}$
 else if(q==NULL) $\rightarrow q == 12 \rightarrow \text{FALSE}$
 else




```
void printList(LNode* list) {}
while:
```



LinkedList-7 Diagram

```
LNode *create_LinkList(void) {}
```

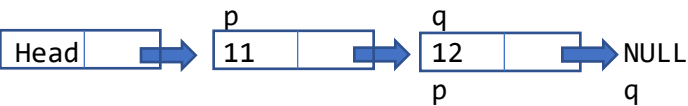
do while:

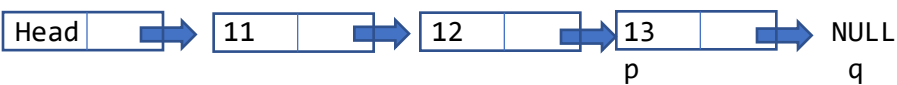
1) 






2) 

3) 

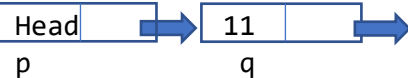
4) 


5) 

```
void Delete_LinkList(LNode *L, int key) {}
```

while (p->next!=NULL && j<i):

key = 12

1) 

2) 

if(q==NULL) → q==12 → FALSE

else if(q->data==key) → q==12 && key==12 → TRUE

else





```
void printList(LNode* list) {}
```

while:

1) Head -> 11
↓
list

2) Head -> 11 -> 12
↓
list

3) Head -> 11 -> 12 -> 13
↓
list

4) Head -> 11 -> 12 -> 13 -> 14
↓
list

5) Head -> 11 -> 12 -> 13 -> 14 -> NULL
↓
list