Struktur Data

Saniati,S.ST.,M.T.

EPISODE 4B

Double Linked List

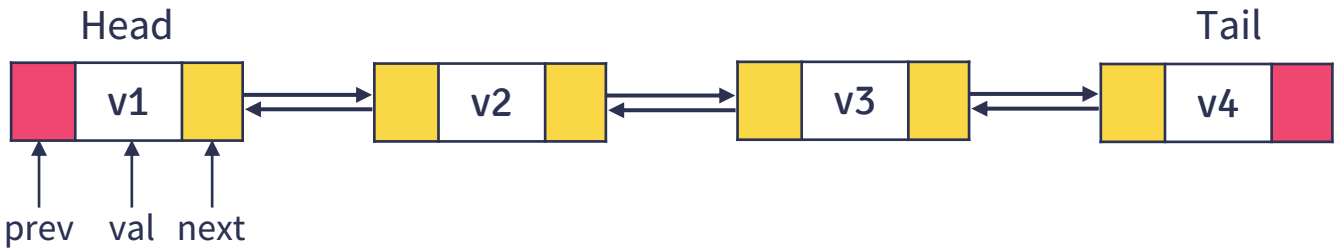
Double Linked List ?

- Double Linked List merupakan suatu linked list yang memiliki dua variabel pointer. Dimana pointer tersebut menunjuk ke node sebelum dan selanjutnya (prev & next).

- Double Linked List terdiri dari sejumlah elemen (node) dimana setiap node memiliki penunjuk prev (menunjuk node sebelumnya) dan next (menunjuk node selanjutnya).

- Penunjuk prev pada node head menunjuk ke NULL, menandakan bahwa node head (node awal).

- Penunjuk next pada node tail menunjuk ke NULL, menandakan bahwa node tail (node akhir).

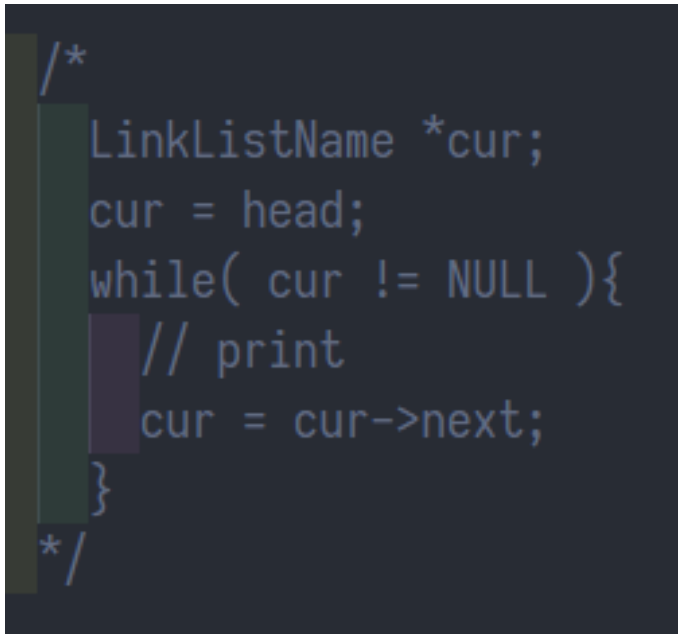


Deklarasi & Inisialisasi ?

```
/*
  struct LinkListName{
    // komponen / member
    dataTypeData1 dataName1;
    . . .
    LinkListName *prev;
    LinkListName *next;
  };
*/
```

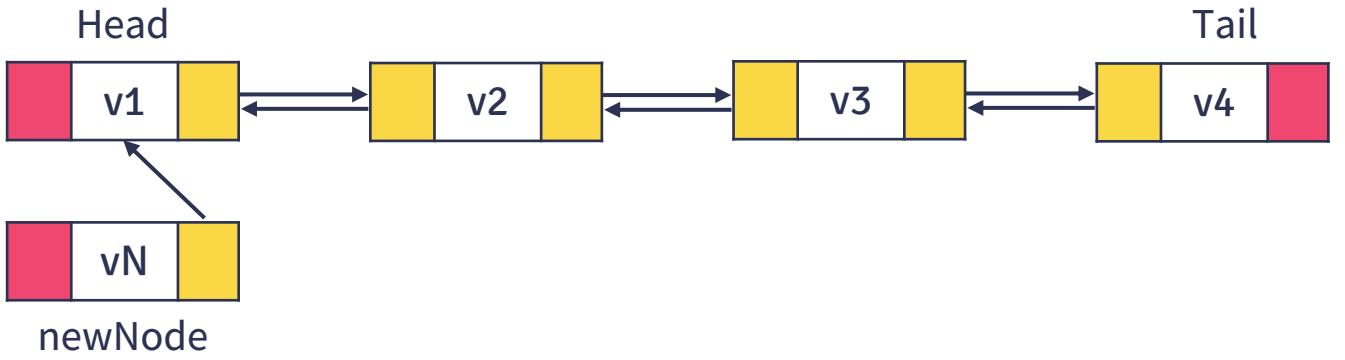
```
/*
  LinkListName *head, *tail;
  head = (LinkListName*) malloc(sizeof(LinkListName));
  tail = new LinkListName();
*/
/*
  head->dataName1 = valData1;
  . . .
  head->prev = NULL;
  head->next = tail;

  tail->dataName1 = valData1;
  . . .
  tail->prev = head;
  tail->next = NULL;
*/
```

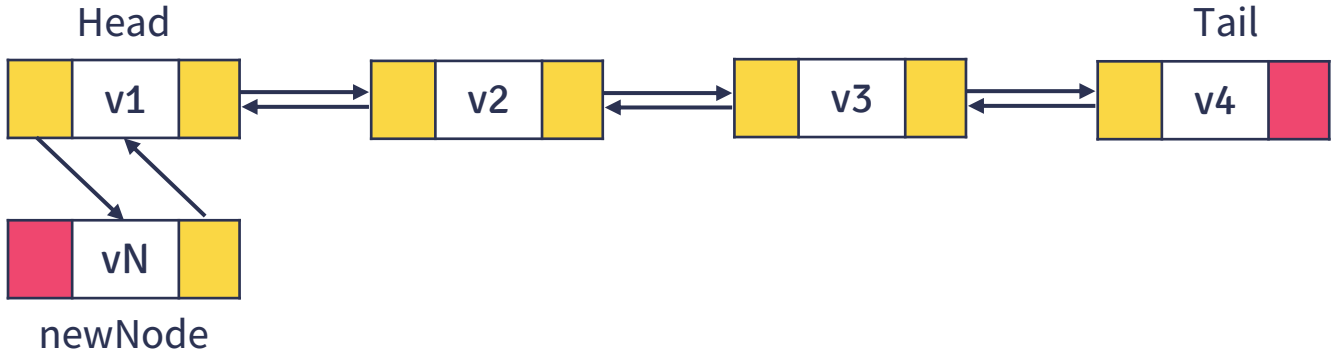
Print Double Linked List ?

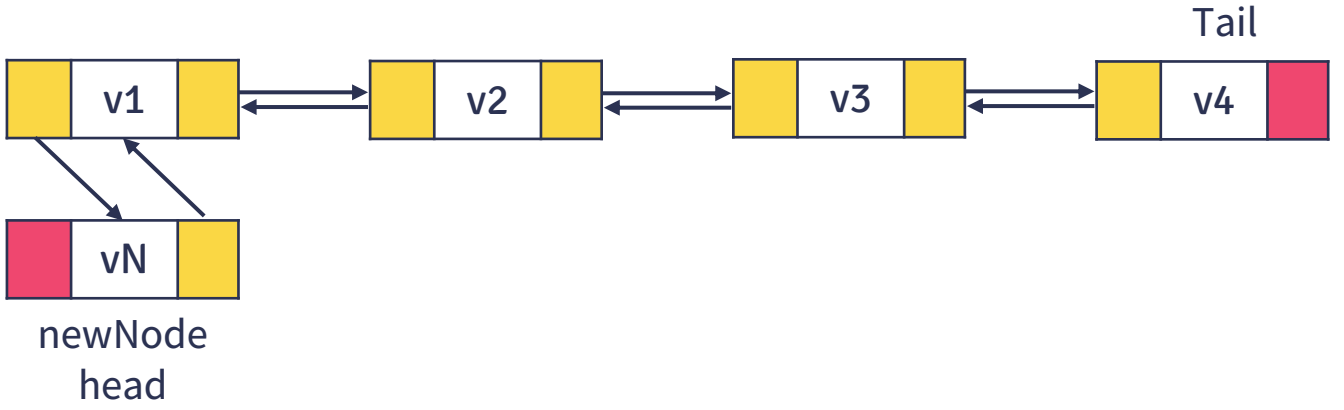


```
/*
  LinkListName *cur;
  cur = head;
  while( cur != NULL ){
    // print
    cur = cur->next;
  }
*/
```

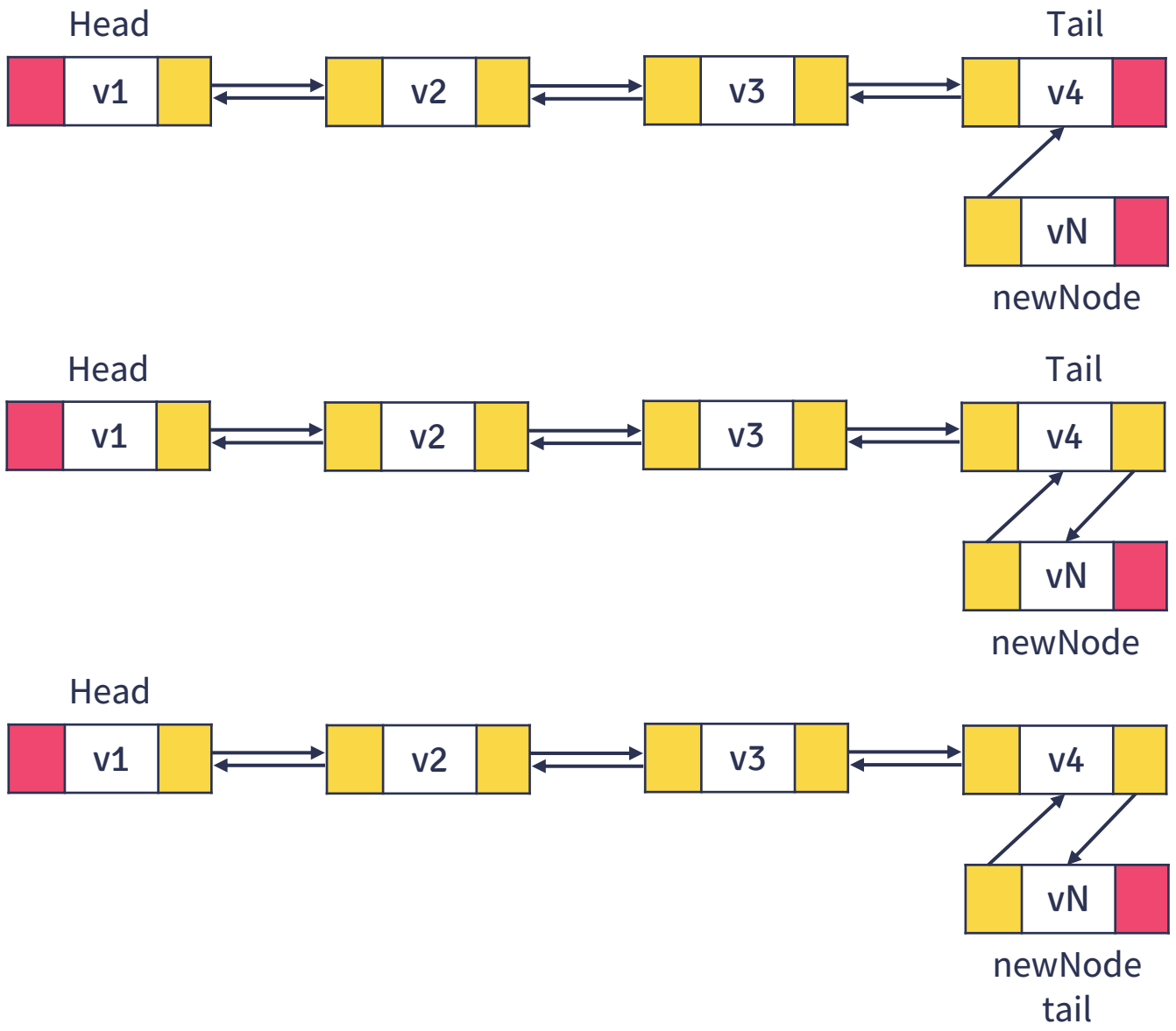
Added at Beginning Node ?



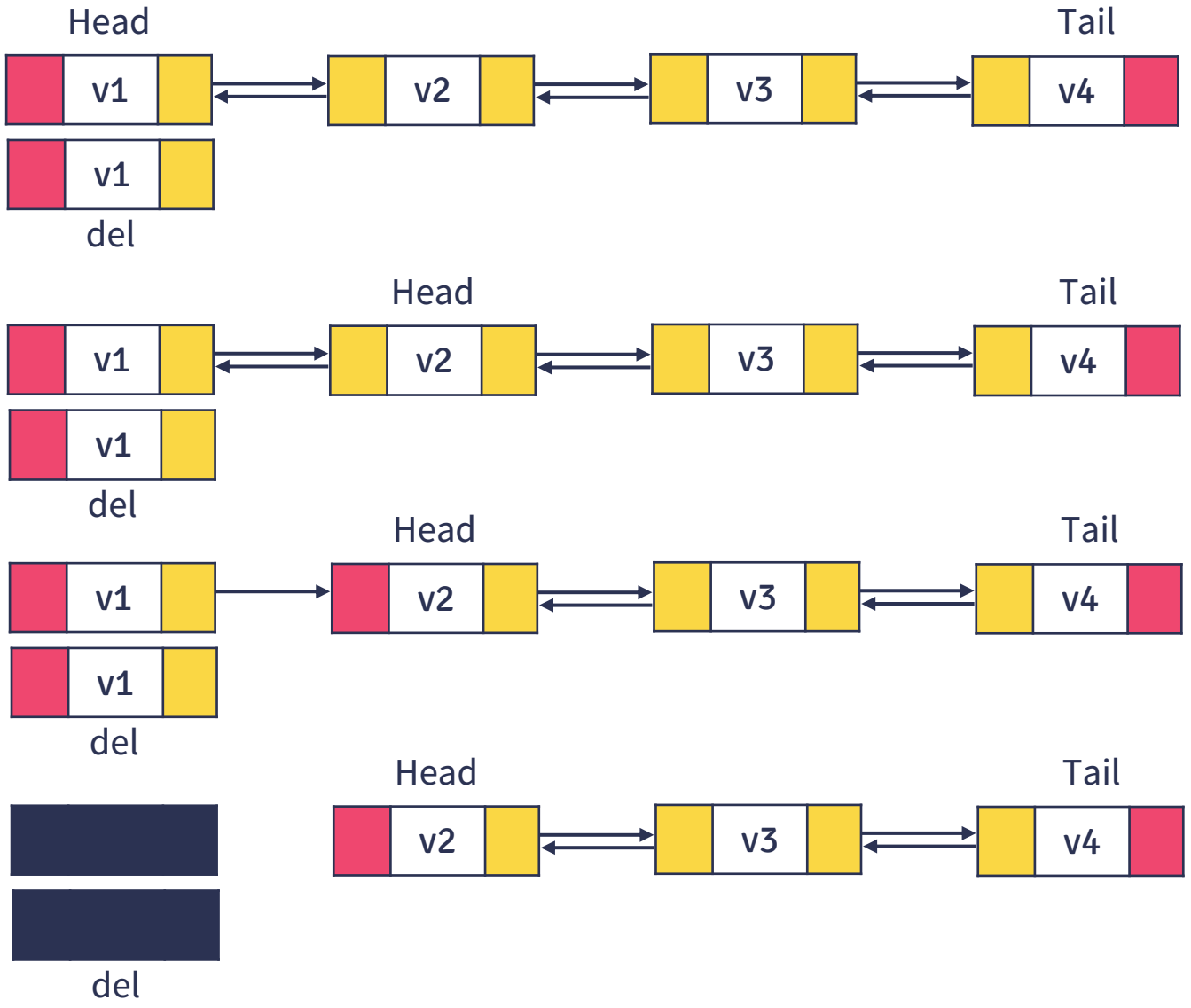




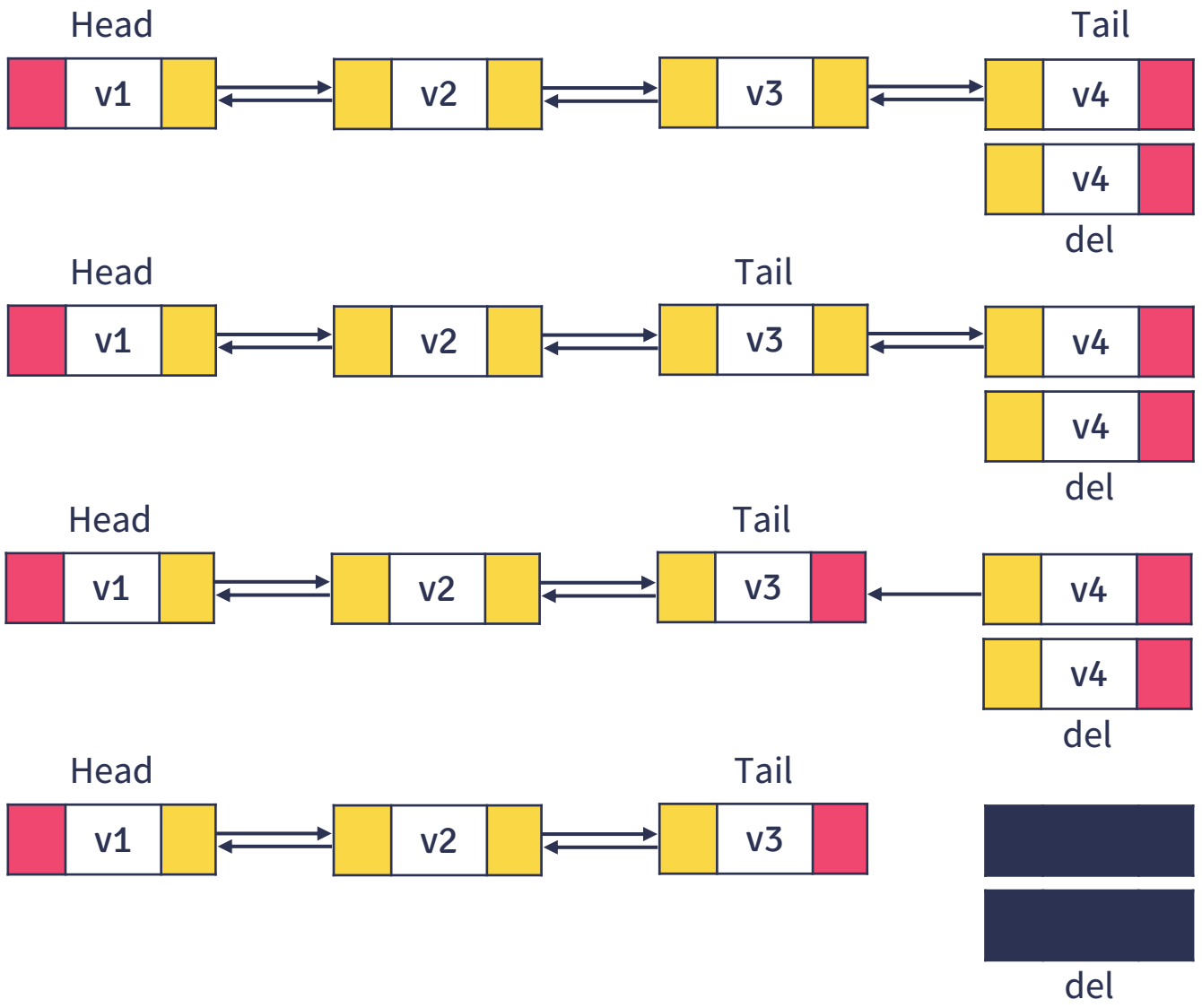
Added at Last Node ?



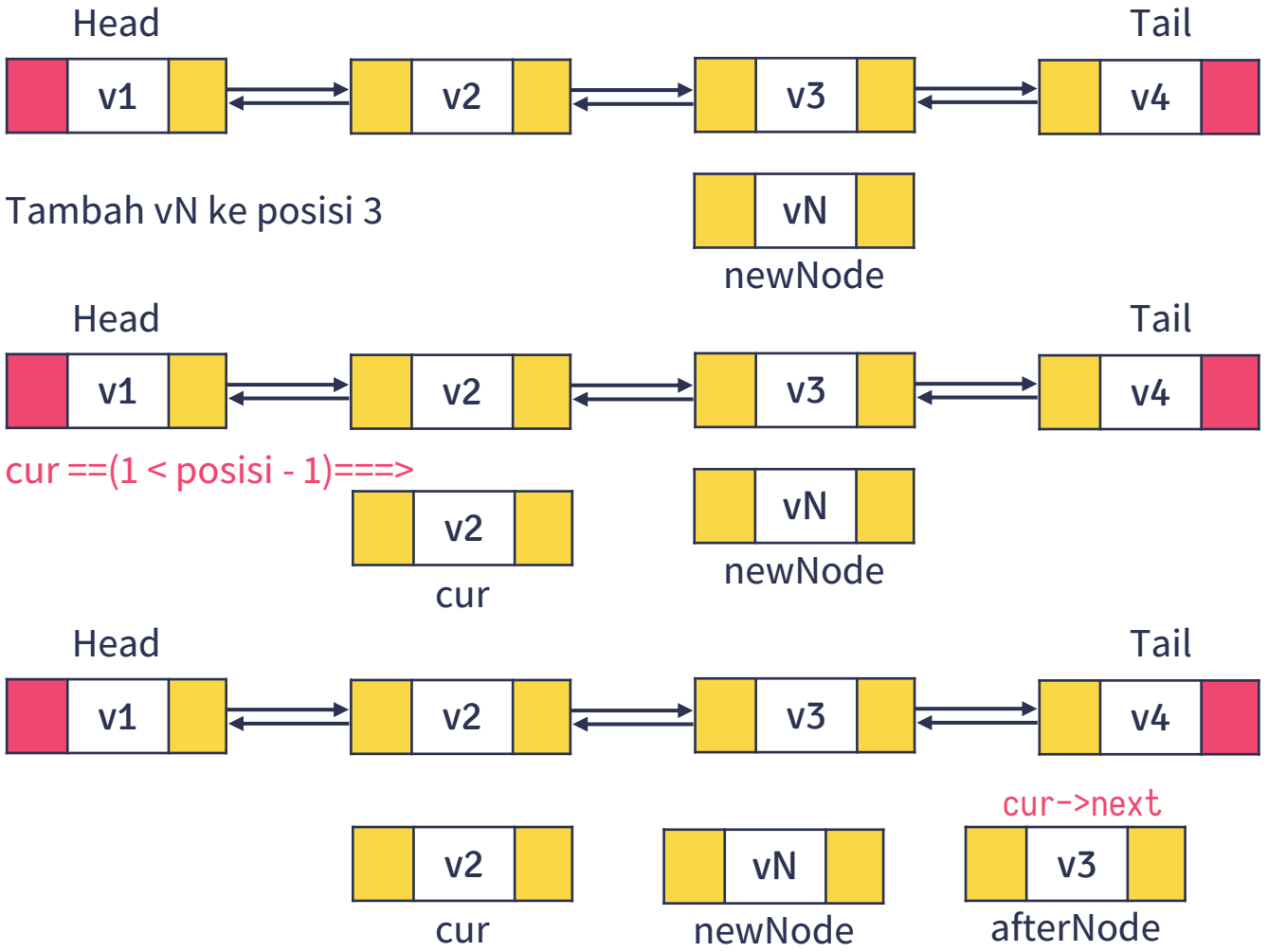
Delete the First Node ?



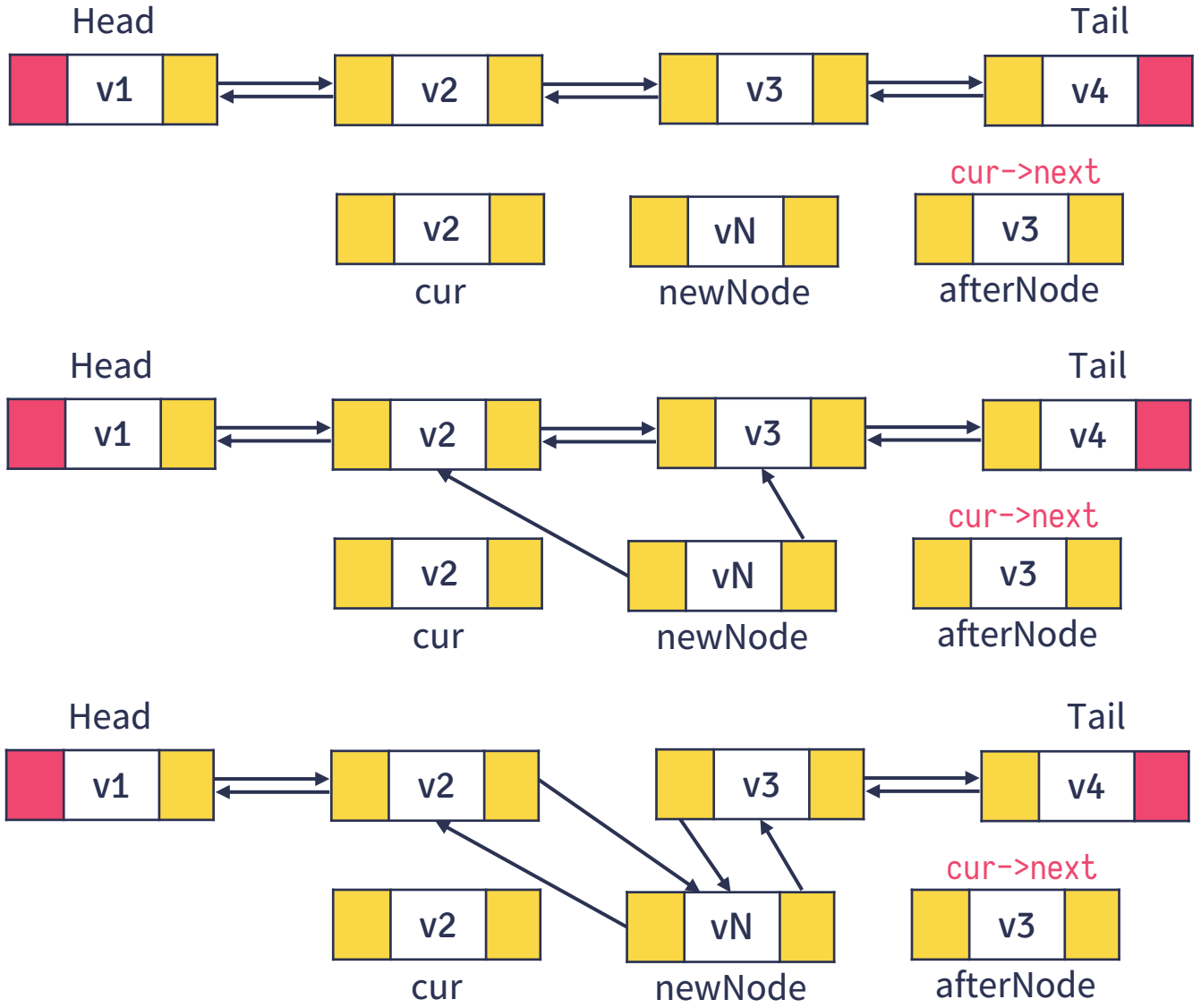
Delete the Last Node ?



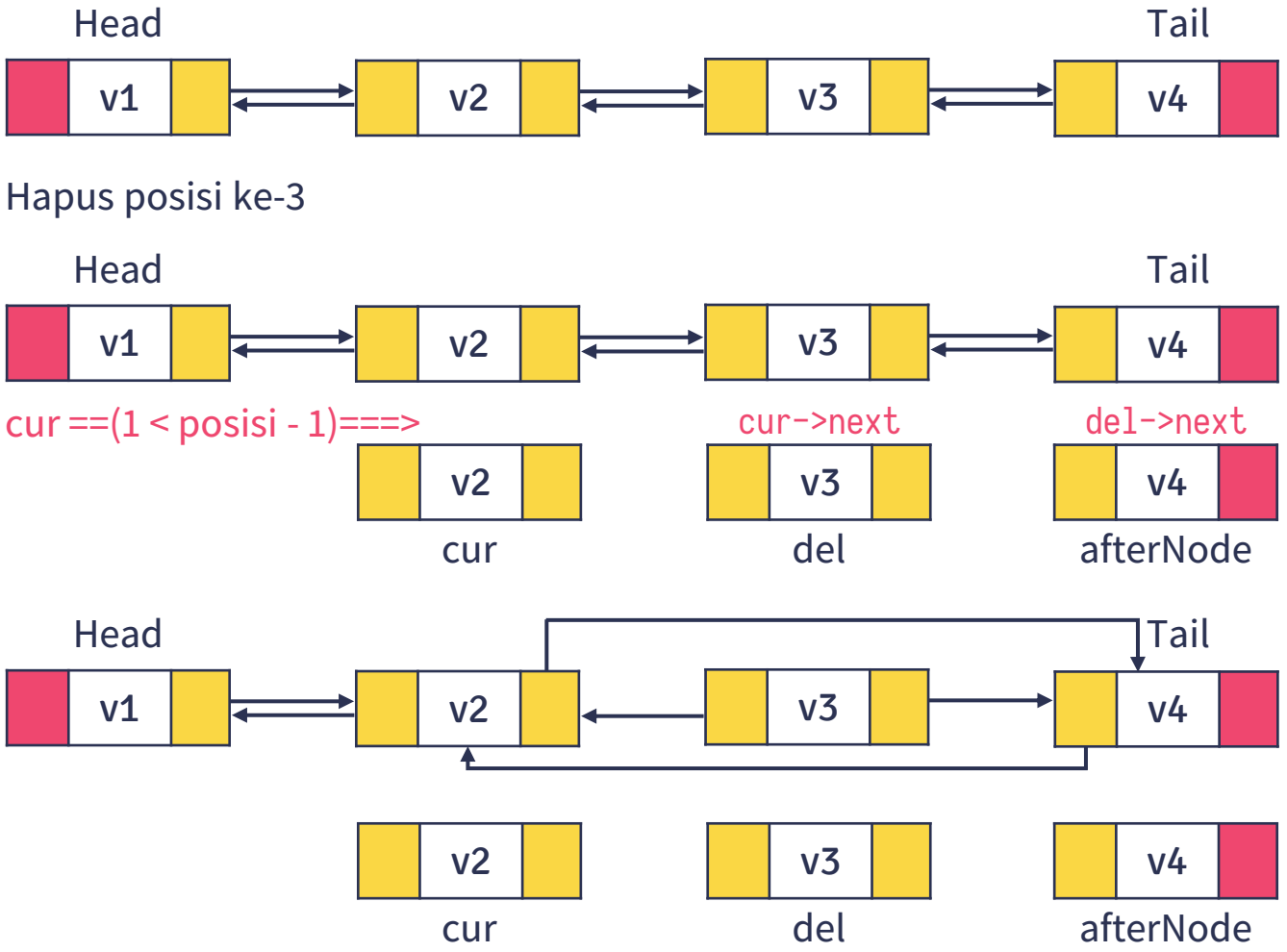
Added at Middle Node ?



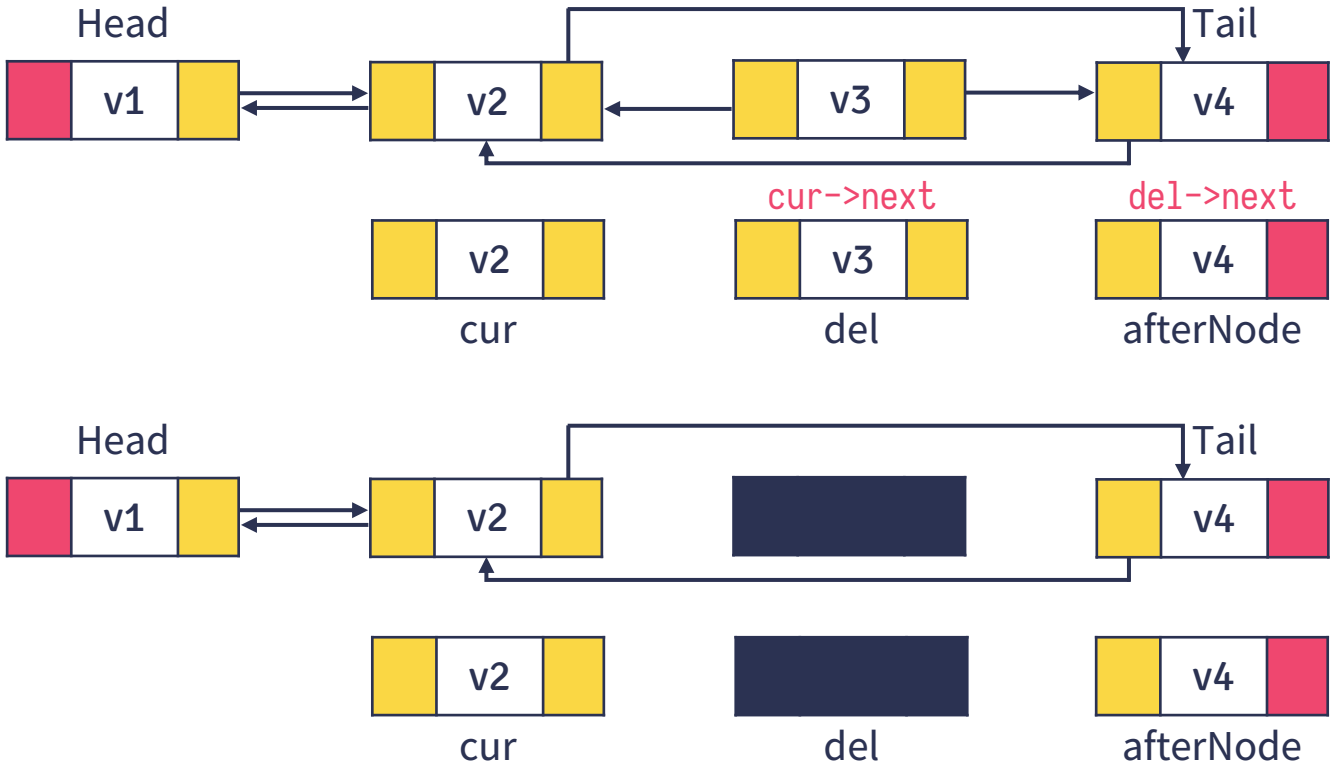
Added at Middle Node ?



Delete at Middle Node ?



Delete at Middle Node ?



Video Selanjutnya

Circular Single Linked List

Thank you

#KEEPLEARNING
#KEEPSPIRITS