هياكل البيانات

المرحلة الثانية

محاضرة(11)

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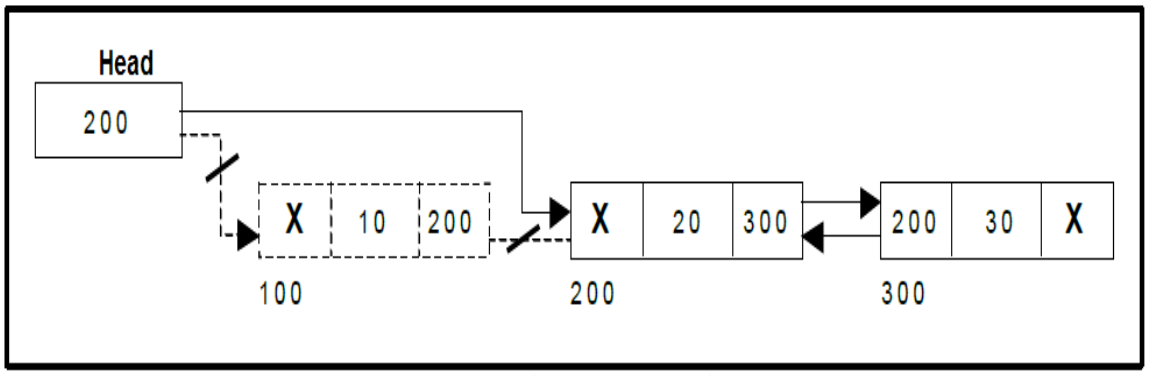
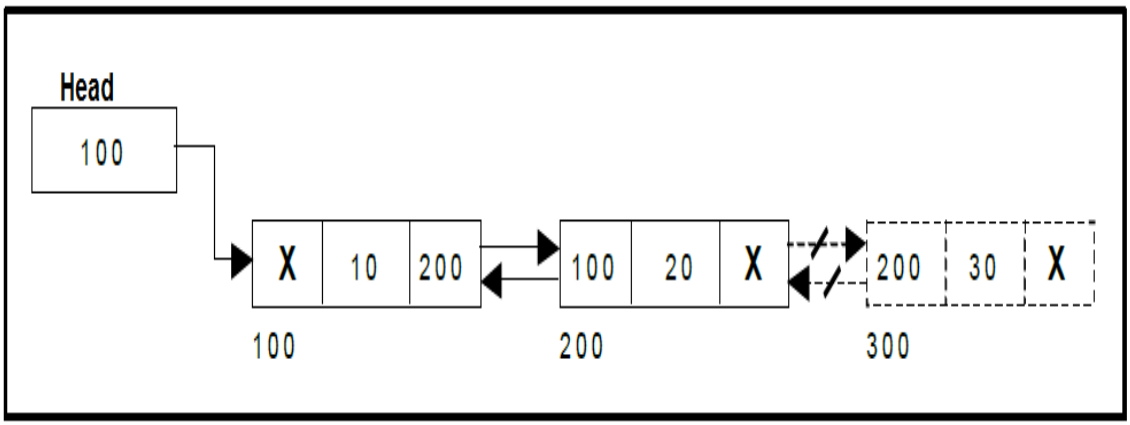
DELETE THE FIRST NODE ON DLL

```
void deletF()
{
 if (head!=NULL)
 {
          head=head->RL;
 head->LL=NULL;
 }
 else
 head=NULL;
}
```



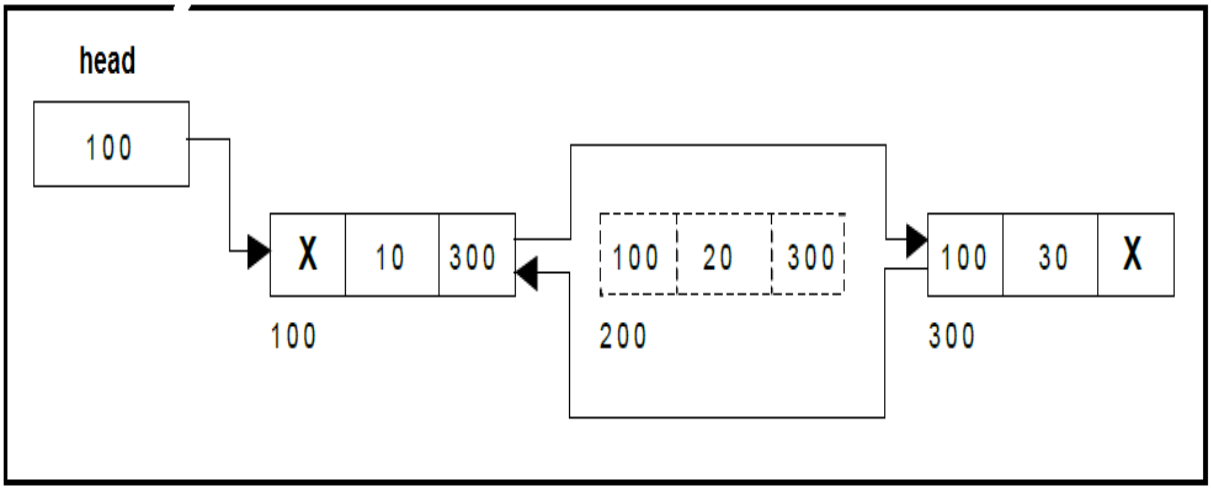
DELETE THE END NODE ON DLL

```
void DeletEnd()
{
          node *q=head;
          while (q->RL->RL!=NULL)
          q=q->RL;
          q->RL=NULL;
}
```



DELETE ANY MID NODE ON DLL

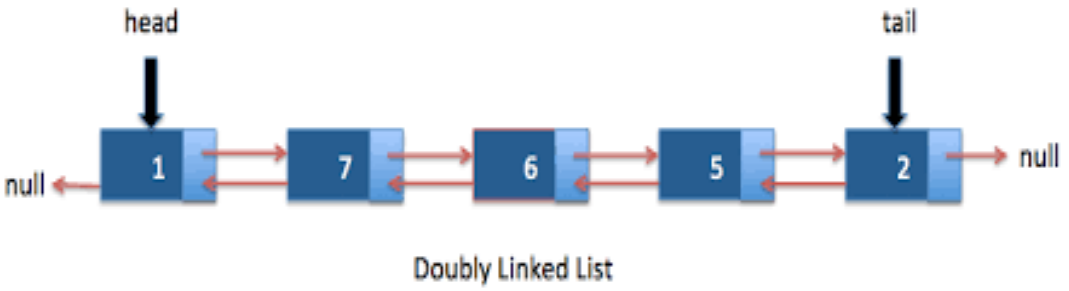
```
void DeleteMid(int y)

{

node *q=head;

while(q->data!=y)

q=q->RL;

q->RL=q->RL->RL;

q->RL->RL->LL=q;

}
```



Traversal and displaying a list (Left to Right) :

To display the information, you have to traverse the list, node by node from the first node, until the end of the list is reached. The function *Display* () is used for traversing and displaying the information stored in the list from left to right.

```
void Display()
 {
          node *q=head;
 do
    {
      cout<< q->Data <<"==";
     q=q->RL;
      }
while (q!=NULL);
}
```

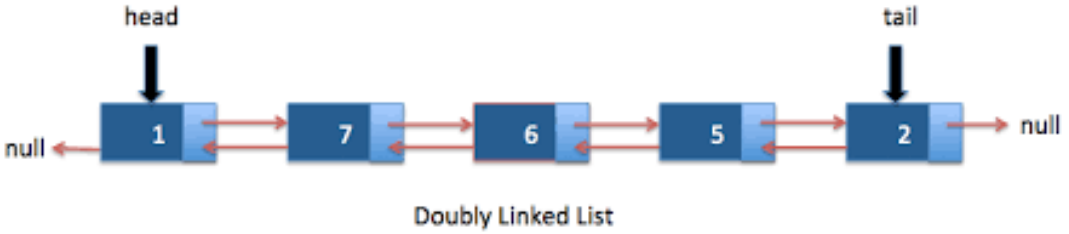


The out put is: 1==7==6==5==2

Traversal and displaying a list (Right to Left):

To display the information from right to left, you have to traverse the list, node by node from the first node, until the end of the list is reached. The function *Display2* () is used for traversing and displaying the information stored in the list from right to left.

```
        void Display2()
{
        node *q=head;

        while(q->RL!=NULL)
                q=q->RL;
(this step to make q in last of the list )


while(q!=NULL)
        {
                cout<< q->Data <<"==";
                q=q->LL;
        }
}
```



The output is: 2==5==6==7==1