DoubleLL7.c | DelAtPos... | Submit | Debugger

```c
struct node {
    int data;
    struct node *prev;
    struct node *next;
};
typedef struct node * NODE;

NODE createNodeInDLL() {
    NODE temp;
    temp = (NODE)malloc(sizeof(struct node));
    temp->prev = NULL;
    temp->next = NULL;
    return temp;
}

void traverseListInDLL(NODE first) {
    NODE lastNode = first;
    while (lastNode != NULL) {
        printf("%d <--> ", lastNode -> data);
        lastNode = lastNode -> next;
    }
    printf("NULL\n");
}

NODE insertAtEndInDLL(NODE first, int x)
{
    NODE temp2 = createNodeInDLL();
    temp2->data = x;

    if(first == NULL)
    {
        return temp2;
    }

    NODE temp = first;

    while( temp->next != NULL )
    {
        temp = temp->next;
    }

    temp->next = temp2;
    temp2->prev = temp;
```

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```
    return first;


}

NODE deleteAtPositionInDLL(NODE first, int position)
{
    if( position <= 0 )
    {
        printf("No such position in DLL so deletion is not
possible\n");
        return first;
    }

    if( position ==1)
    {
        if(first->next==NULL)
        {
            printf("The deleted element from DLL : %d\n", first-
>data);
            return NULL;
        }

        int x = first->data;
        first = first->next;
        first->prev = NULL;
        printf("The deleted element from DLL : %d\n", x);

        return first;

    }


    NODE temp = first;

    NODE temp_prev;

    for(int i =1 ; i< (position) ; i++ )
    {
        if(temp == NULL)
        {
            printf("No such position in DLL so deletion is not
possible\n");
            return first;
        }
```

```
91          temp= temp->next;
92      }
93
94      if(temp == NULL)
95      {
96          printf("No such position in DLL so deletion is not
97  possible\n");
98          return first;
99      }
100
101     else if( temp->next == NULL )
102     {
103         printf("The deleted element from DLL : %d\n" , temp->data
104 );
105         temp_prev->next = NULL;
106         return first;
107     }
108     else
109     {
110         printf("The deleted element from DLL : %d\n" ,temp->data
111 );
112         temp_prev->next = temp->next;
113         temp_prev->next->prev = temp_prev;//temp->prev
114         return first;
115     }
116
117
118 }
119
120
```

Terminal Test cases