

```

//linked list insertion

#include <stdio.h>

#include <stdlib.h>

struct node
{
    int data;

    struct node *next;
}*first=NULL;

void insert(struct node **p,int pos,int no)
{
    struct node *t;
    t=(struct node*) malloc (sizeof(struct node));
    t->data=no;
    if(pos==0)
    {
        t->next=*p;
        *p=t;
    }
    else{
        struct node *temp=*p;
        for(int i=1;i<pos && (p!=NULL);i++)
            temp=temp->next;
        t->next=temp->next;
        temp->next=t;
    }

}

void display(struct node *p)
{
    while(p!=NULL)

```

```

{
    printf("%d\t",p->data);
    p=p->next;
}

}

void main()
{
    int ch,p,n;
    while(1)
    {
        printf("enter 1 to insert 2 to display 3 to exit");
        printf("enter the choice:");
        scanf("%d",&ch);
        switch(ch)
        {
            case 1:printf("enter the no and pos where to insert:");
                    scanf("%d%d",&p,&n);
                    insert(&first,p,n);
                    break;
            case 2:display(first);
                    break;
            case 3:exit(0);
            default:printf("invalid choice");
                    break;
        }
    }
}

```

}

Output

```
enter 1 to insert 2 to display 3 to exitenter the choice:1
enter the no and pos where to insert:0 11
enter 1 to insert 2 to display 3 to exitenter the choice:1
enter the no and pos where to insert:1 12
enter 1 to insert 2 to display 3 to exitenter the choice:2
11      12      enter 1 to insert 2 to display 3 to exitenter the choice:1
enter the no and pos where to insert:0 13
enter 1 to insert 2 to display 3 to exitenter the choice:2
13      11      12      enter 1 to insert 2 to display 3 to exitenter the choice:1
enter the no and pos where to insert:2 14
enter 1 to insert 2 to display 3 to exitenter the choice:2
13      11      14      12      enter 1 to insert 2 to display 3 to exitenter the choice:3
```