

# Linked List

```
#include <stdio.h>
#include <stdlib.h>

struct Node
{
    int data;
    struct Node *next;
}*first=NULL;

void create(int A[],int n)
{
    int i;
    struct Node *t,*last;
    first=(struct Node *)malloc(sizeof(struct Node));
    first->data=A[0];
    first->next=NULL;
    last=first;

    for(i=1;i<n;i++)
    {
        t=(struct Node*)malloc(sizeof(struct Node));
        t->data=A[i];
        t->next=NULL;
        last->next=t;
        last=t;
    }
}

void Display(struct Node *p)
{
    while(p!=NULL)
    {
        printf("%d ",p->data);
        p=p->next;
    }
}
```

```
}
```

```
void Insert(struct Node *p,int index,int x)
{
    struct Node *t;
    int i;

    if(index < 0 || index > count(p))
        return;
    t=(struct Node *)malloc(sizeof(struct Node));
    t->data=x;

    if(index == 0)
    {
        t->next=first;
        first=t;
    }
    else
    {
        for(i=0;i<index-1;i++)
            p=p->next;
        t->next=p->next;
        p->next=t;
    }

}
```

```
int main()
{

    int A[]={10,20,30,40,50};
    create(A,5);

    Insert(first,0,5);
```

```
    Display(first);  
    return 0;  
}
```