

Singly Linked List

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

struct node{
    int data;
    struct node * next;
};

int main() {

    //Create a Linked list with 5 item

    struct node *temp,*head,*pre,*q;
    int val;
    temp=(struct node*)malloc(sizeof(struct node));
    printf("Enter Data item 1 : ");
    scanf("%d",&val);
    temp->data=val;
    temp->next=NULL;
    head=temp;

    for( int x=2;x<6;x++){
        pre=temp;
        temp=(struct node*)malloc(sizeof(struct node));
        printf("Enter Data item %d : ",x);
        scanf("%d",&val);
        temp->data=val;
        temp->next=NULL;
        pre->next=temp;
    }
    printf("\n\n");

    //Display a Linked List

    q=head;
    while(q!=NULL){
        printf("%d ",q->data);
        q=q->next;
    }
    return 0;
}
```

Doubly Linked List

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

struct node{
    struct node * back;
    int data;
    struct node * next;
};

int main() {

    //Create a Linked list with 5 item

    struct node *temp,*head,*pre,*last,*q;
    int val;

    temp=(struct node*)malloc(sizeof(struct node));
    printf("Enter Data item 1 : ");
    scanf("%d",&val);
    temp->back=NULL;
    temp->data=val;
    temp->next=NULL;
    head=temp;

    for( int x=2;x<6;x++){
        pre=temp;
        temp=(struct node*)malloc(sizeof(struct node));
        printf("Enter Data item %d : ",x);
        scanf("%d",&val);
        temp->back=pre;
        temp->data=val;
        temp->next=NULL;
        pre->next=temp;
    }
    last=temp;
    printf("\n\n");

    //Display a Linked List

    q=head;
    while(q!=NULL){
        printf("%d ",q->data);
        q=q->next;
    }
    printf("\n\n");

    //Display a Riversed Linked List

    q=last;
    while(q!=NULL){
        printf("%d ",q->data);
        q=q->back;
    }

    return 0;
}
```