

DOULE:

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

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

```
struct node
```

```
{
```

```
struct node*prev;
```

```
int data;
```

```
struct node*next;
```

```
}*head,*current;
```

```
void creation(){
```

```
int size;
```

```
printf("Enter the linklist size= ");
```

```
scanf("%d",&size);
```

```
int i=1;
```

```
while(i<=size){
```

```
    int value;
```

```
    printf("Enter the value= ");
```

```
    scanf("%d",&value);
```

```
    struct node*newnode;
```

```
    newnode=(struct node*)malloc(sizeof(struct node));
```

```
    newnode->prev=NULL;
```

```
    newnode->data=value;
```

```
    newnode->prev=NULL;
```

```
    if(head==NULL){
```

```

        head=newnode;
        current=newnode;
    }
else{
    current->next=newnode;
    newnode->prev=current;
    current=newnode;
}
i++;
}
}

void display(){
    struct node*temp;
    temp=head;
    while(temp!=NULL){
        printf("%d->",temp->data);
        temp=temp->next;
    }

}

void insertAtfast(){
    int value;
    printf("Enter the value= ");
    scanf("%d",&value);

```

```

struct node*newnode;

newnode=(struct node*)malloc(sizeof(struct node));

newnode->data=value;

newnode->prev=NULL;

newnode->next=head;

head->prev=newnode;

head=newnode;

}

void insertAtlast(){

    int value;

    printf("Enter the value= ");

    scanf("%d",&value);

    struct node*newnode;

    newnode=(struct node*)malloc(sizeof(struct node));

    newnode->data=value;

    newnode->next=NULL;

    current->next=newnode;

    newnode->prev=current;

    current=newnode;

}

void specific(){

    int pos;

    printf("Enter the position= ");

```

```
scanf("%d",&pos);
struct node*temp=head;
for(int i=1;i<pos-1;i++){
    temp=temp->next;
}
int value;
printf("Enter the value= ");
scanf("%d",&value);
struct node*newnode;
newnode=(struct node*)malloc(sizeof(struct node));
newnode->data=value;
newnode->next=temp->next;
temp->next->prev=newnode;
temp->next=newnode;
temp->prev=newnode;
newnode->prev=temp;

}

void deleteAtfirst(){
struct node*temp=head;
head=head->next;
free(temp);
head->prev=NULL;
}
```

```
void deleteAtlast(){
    struct node*temp=current;
    current=current->prev;
    free(temp);
    current->next=NULL;
}

void deleteAtspecific(){
    struct node*temp=head;
    int pos;
    printf("Enter the position= ");
    scanf("%d",&pos);
    for(int i=1;i<pos-1;i++){
        temp=temp->next;
    }
    temp->next=temp->next->next;
    temp->next->prev=temp;
}

}
```