~~#include~~

```
. void add_at_begin() {
   struct node *ptr = NULL;
   ptr = (struct node *) malloc(sizeof(struct node));
   printf("enter the node data:");
   scanf("%d", &ptr -> data);
   ptr -> prev = NULL;
   ptr -> next = NULL;

   if (head == NULL) {
   head = ptr;
   }
   else {
       ptr -> next = head;
       head -> prev = ptr;
       head = ptr;
   }
}


void delete_at_specifiedloc() {
int i, loc;
   if (head == NULL) {
       printf("empty list\n");
   }
   else {
       struct node *ptr = head;
       printf("enter the location:");
       scanf("%d", &loc);

       for(i=1; i< loc; i++) {
       ptr = ptr -> next;
       }
```

```c
        ptr -> prev -> next = ptr -> next;
        ptr -> next -> prev = ptr -> prev;
            free (ptr);
        }
    }

    void display() {

    if (head == NULL) {
        printf(" emty ");  }

    else {
            struct node  *temp = head;
            while(temp != NULL) {

                printf("%d\t", temp -> data);
        temp = temp -> next;
            }
            printf("\n");
        }
    }
```