

WAP TO IMPLEMENT QUEUES USING LINKED LIST

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

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

```
struct Node {
```

```
    int data;
```

```
    struct Node* next;
```

```
};
```

```
void insertAtEnd(struct Node** head, int value) {
```

```
    struct Node* newNode = (struct Node*)malloc(sizeof(struct Node));
```

```
    struct Node* temp = *head;
```

```
    newNode->data = value;
```

```
    newNode->next = NULL;
```

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

```
        *head = newNode;
```

```
        return;
```

```
    }
```

```
    while (temp->next != NULL) {
```

```
        temp = temp->next;
```

```
    }
```

```
    temp->next = newNode;
```

```
}
```

```
void deleteAtBeginning(struct Node** head) {
```

```

if (*head == NULL) {

    printf("Linked list is already empty.\n");

    return;

}


struct Node* temp = *head;

*head = (*head)->next;

free(temp);

}

void displayLinkedList(struct Node* head) {

    struct Node* temp = head;

    if (temp == NULL) {

        printf("Linked list is empty.\n");

        return;

    }

    while (temp != NULL) {

        printf("%d -> ", temp->data);

        temp = temp->next;

    }

    printf("NULL\n");

}

int main() {

    struct Node* head = NULL;

```

```
insertAtEnd(&head, 1);  
insertAtEnd(&head, 2);  
insertAtEnd(&head, 3);  
insertAtEnd(&head, 4);  
insertAtEnd(&head, 5);  
deleteAtBeginning(&head);  
printf("The Queue elements are:\n");  
displayLinkedList(head);  
return 0;  
}
```

OUTPUT:

```
26 The Queue elements are:  
27 2 -> 3 -> 4 -> 5 -> NULL  
28  
29 Process returned 0 (0x0)   execution time : 0.047 s  
30 Press any key to continue.  
31  
32  
33
```