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1: #include<stdio.h>
2: #include<stdlib.h>
3:
4: struct Node
5: {
6:     int data;
7:     struct Node *next;
8: };
9:
10: void linkedListTraversal(struct Node *head){
11:     struct Node *ptr = head;
12:     do{
13:         printf("Element is %d\n", ptr->data);
14:         ptr = ptr->next;
15:     }while(ptr!=head);
16: }
17:
18: struct Node * insertAtFirst(struct Node *head, int data){
19:     struct Node * ptr = (struct Node *) malloc(sizeof(struct Node));
20:     ptr->data = data;
21:
22:     struct Node * p = head->next;
23:     while(p->next != head){
24:         p = p->next;
25:     }
26:     // At this point p points to the last node of this circular
27:
28:     p->next = ptr;
29:     ptr->next = head;
30:     head = ptr;
31:     return head;
32:
33: }
34:
35: int main(){
36:
37:     struct Node *head;
38:     struct Node *second;
39:     struct Node *third;

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40:     struct Node *fourth;
41:
42:     // Allocate memory for nodes in the Linked List in Heap
43:     head = (struct Node *)malloc(sizeof(struct Node));
44:     second = (struct Node *)malloc(sizeof(struct Node));
45:     third = (struct Node *)malloc(sizeof(struct Node));
46:     fourth = (struct Node *)malloc(sizeof(struct Node));
47:
48:     // Link first and second nodes
49:     head->data = 4;
50:     head->next = second;
51:
52:     // Link second and third nodes
53:     second->data = 3;
54:     second->next = third;
55:
56:     // Link third and fourth nodes
57:     third->data = 6;
58:     third->next = fourth;
59:
60:     // Terminate the list at the third node
61:     fourth->data = 1;
62:     fourth->next = head;
63:
64:     printf("Circular Linked list before insertion\n");
65:     linkedListTraversal(head);
66:     head = insertAtFirst(head, 54);
67:     head = insertAtFirst(head, 58);
68:     head = insertAtFirst(head, 59);
69:     printf("Circular Linked list after insertion\n");
70:     linkedListTraversal(head);
71:     //Note that the rest of the operations are similar to that o
72:
73:     return 0;
74: }
75:

```