

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 // Define the structure for the linked list node
5 struct Node {
6     int data;
7     struct Node* next;
8 };
9
10 // Function to insert a new node at the beginning
11 void insertAtBeginning(struct Node** head, int newData) {
12     struct Node* newNode = (struct Node*)malloc(sizeof(struct Node));
13     newNode->data = newData;
14     newNode->next = *head;
15     *head = newNode;
16 }
17
18 // Function to print the linked list
19 void printList(struct Node* head) {
20     struct Node* temp = head;
21     while (temp != NULL) {
22         printf("%d -> ", temp->data);
23         temp = temp->next;
24     }
25     printf("NULL\n");
26 }
27
```

Linked list after inserting at beginning:

30 -> 20 -> 10 -> NULL

== Code Execution Successful ==

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```
14     *newNode = head;
15     *head = newNode;
16 }
17
18 // Function to print the linked list
19 void printList(struct Node* head) {
20     struct Node* temp = head;
21     while (temp != NULL) {
22         printf("%d -> ", temp->data);
23         temp = temp->next;
24     }
25     printf("NULL\n");
26 }
27
28 int main() {
29     struct Node* head = NULL; // Start with an empty list
30
31     // Insert nodes at the beginning
32     insertAtBeginning(&head, 10);
33     insertAtBeginning(&head, 20);
34     insertAtBeginning(&head, 30);
35
36     printf("Linked list after inserting at beginning:\n");
37     printList(head);
38
39     return 0;
40 }
```

Linked list after inserting at beginning:
30 -> 20 -> 10 -> NULL

== Code Execution Successful ==

main.c



Run

Output

Clear

```
1 #include <stdio.h>
2
3 int main() {
4     int arr[100], n, pos, i;
5
6     // Input size of array
7     printf("Enter number of elements: ");
8     scanf("%d", &n);
9
10    // Input array elements
11    printf("Enter %d elements:\n", n);
12    for(i = 0; i < n; i++) {
13        scanf("%d", &arr[i]);
14    }
15
16    // Input position to delete
17    printf("Enter the position to delete (1 to %d): ", n);
18    scanf("%d", &pos);
19
20    // Check if position is valid
21    if(pos < 1 || pos > n) {
22        printf("Invalid position!\n");
23    } else {
24        // Shift elements to left
25        for(i = pos - 1; i < n - 1; i++) {
26            arr[i] = arr[i + 1];
27        }
28    }
29}
```

Enter number of elements: 3

Enter 3 elements:

3

4

5

Enter the position to delete (1 to 3): 2

Array after deletion:

3 5

--- Code Execution Successful ---

```
12
13     scanf("%d", &arr[i]);
14 }
15
16 // Input position to delete
17 printf("Enter the position to delete (1 to %d): ", n);
18 scanf("%d", &pos);
19
20 // Check if position is valid
21 if(pos < 1 || pos > n) {
22     printf("Invalid position!\n");
23 } else {
24     // Shift elements to left
25     for(i = pos - 1; i < n - 1; i++) {
26         arr[i] = arr[i + 1];
27     }
28
29     n--; // Reduce array size
30
31     printf("Array after deletion:\n");
32     for(i = 0; i < n; i++) {
33         printf("%d ", arr[i]);
34     }
35 }
36
37 return 0;
38 }
```

Enter number of elements: 3

Enter 3 elements:

3

4

5

Enter the position to delete (1 to 3): 2

Array after deletion:

3 5

*** Code Execution Successful ***

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