```
#include <stdio.h>
#include <stdlib.h>
typedef struct Node {
int data;
struct Node* prev;
struct Node* next;
} Node;

Node* createNode(int value) {
Node* newNode = (Node*)malloc(sizeof(Node));
newNode-> data = value;

newNode-> prev = 0;
newNode-> next = 0;
return newNode;
}

void displayList(Node* head)
{
Node* temp = head;
printf("\nDoubly Linked List Structure:\n");
printf("| %-10s | %-10s | %-5s | %-10s |\n", "Node Addr", "Prev Addr", "Data", "Next Addr");
while (temp != 0)
{
printf("| %-10p | %-10p | %-5d | %-10p
|\n",(void*)temp,(void*)temp->prev,temp->data,(void*)temp->next);
temp = temp->next;
}
}
int main()
{
```

```
    Node* N1= createNode(1);
    Node* N2= createNode(2);
    Node* N3= createNode(3);
    Node* N4= createNode(4);
    Node* N5= createNode(5);
    N1->next=N2;
    N2->prev=N1;
    N2->next=N3;
    N3->prev=N2;
    N3->next=N4;
    N4->prev=N3;
    N4->next=N5;
    N5->prev=N4;
    displayList(N1);
    free(N1);
    free(N2);
    free(N3);
    free(N4);
    free(N5);

}
```

```
Doubly Linked List Structure:
| Node Addr  | Prev Addr  | Data  | Next Addr  |
| 0000000000701400 | 0000000000000000 | 1     | 0000000000701420 |
| 0000000000701420 | 0000000000701400 | 2     | 0000000000701440 |
| 0000000000701440 | 0000000000701420 | 3     | 0000000000701460 |
| 0000000000701460 | 0000000000701440 | 4     | 0000000000701480 |
| 0000000000701480 | 0000000000701460 | 5     | 0000000000000000 |

Process returned 0 (0x0)   execution time : 0.010 s
Press any key to continue.
```