

```
1 //
2 // Created by hfwei on 2023/12/20.
3 //
4
5 #ifndef INC_2023_CPL_CODING_0_13_LINKED_LIST_LL_LL_H_
6 #define INC_2023_CPL_CODING_0_13_LINKED_LIST_LL_LL_H_
7
8 // adding code below
9
10 #include <stdbool.h>
11 typedef struct node {
12     int val;
13     struct node *next;
14 } Node;
15
16 typedef struct ll {
17     Node *head;
18     Node *tail;
19     int size;
20 } LinkedList;
21
22 void Init(LinkedList *list);
23
24 bool IsEmpty(const LinkedList *list);
25 bool IsSingleton(const LinkedList *list);
26
27 /**
28  * @brief Get the value of the head node.
29  * @param list
30  * @return -1 if list is empty, otherwise the value of the head node.
31  */
32 int GetHeadVal(const LinkedList *list);
33 Node *Search(const LinkedList *list, int val);
34
35 void Print(const LinkedList *list);
36
37 void Append(LinkedList *list, int val);
38 void Insert(LinkedList *list, Node *prev, int val);
39
40 /**
41  * @brief Delete the node after prev from list.
42  * @param list
43  * @param prev
44  */
45 void Delete(LinkedList *list, Node *prev);
46
47 void Free(LinkedList *list);
48
49 #endif //INC_2023_CPL_CODING_0_13_LINKED_LIST_LL_LL_H_
```