

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

struct linked_list
{
    int number;
    struct linked_list *next;
};

typedef struct linked_list node;
node *head = NULL, *last = NULL;

void create_linked_list();
void print_linked_list();
void insert_at_last(int value);
void insert_at_first(int value);
void insert_after(int key, int
value);
void delete_item(int value);
void search_item(int value);

int main()
{
    int key, value;
```

```
// Create a linked list
```

```
printf("Create Linked List\n");
```

```
create_linked_list();
```

```
print_linked_list();
```

```
// Insert value at last position
```

```
to existing Linked List
```

```
printf("\nInsert new item at last\n");
```

```
scanf("%d", &value);
```

```
insert_at_last(value);
```

```
print_linked_list();
```

```
// Insert value at first position
```

```
to existing Linked List
```

```
printf("\nInsert new item at first\n");
```

```
scanf("%d", &value);
```

```
insert_at_first(value);
```

```
print_linked_list();
```

```
// Insert value after a defined
```

```
value to existing Linked List
```

```
    printf("\nEnter a KEY (existing  
item of List), after that you want  
to insert a value\n");  
    scanf("%d", &key);  
    printf("\nInsert new item after %d  
KEY\n", key);  
    scanf("%d", &value);  
    insert_after(key, value);  
    print_linked_list();
```

```
    // Search an item from Linked List  
    printf("\nEnter an item to search  
it from List\n");  
    scanf("%d", &value);  
    search_item(value);
```

```
    // Delete value from List  
    printf("\nEnter a value, which you  
want to delete from list\n");  
    scanf("%d", &value);  
    delete_item(value);  
    print_linked_list();
```

```
    return 0;  
}
```

