

Question 1:

1. The program is saved in Q1.py
2. It allows the user to insert data to a singly linked list and count number of data by using a recursive method.
3. Execute as followings:

```
23     a.insert('CAN')
24     a.insert('SHA')
25     a.insert('SZX')
26     print(a.recursive
```

PROBLEMS

OUTPUT

DEBUG CON

Microsoft Windows [版本 10.
(c) Microsoft Corporation。

C:\Users\qweer>"C:/Program
5

Question 2:

1. This program is saved in Q2.py
2. It allows user to sort a singly linked list by quick sort
3. Execute as followings:

```
C:\Users\qweer>"C:/Program Files/Python39/python.exe"  
['1', '21', '23', '38', '90', '223', '789', '4532']
```

Question 3:

1. This program is saved in Q3.py
2. It allows the user to show the solution of tower of Hanoi with n disks.
3. Execute as followings:

```
A --> C  
A --> B  
C --> B  
A --> C  
B --> A  
B --> C  
A --> C
```