Judge whether there is a circle the chain table

There is a chain table, and you know the header.

1,How to judge there is a circle in the chain table.

2.How to know the length of the chain table

3.To find the circle’s start point

4.How to know the length of chain

method：

1、about the first question,对于问题1，Using the method of catching up, set the two pointer slow, fast, start from scratch, each step forward 1 steps, the 2 step. If there is a ring, the two meet; if there is no ring, fast encountered NULL exit.

2、Record the collision point 1 of the problem P, slow, fast from the start, the number of the second collision point through the operation of the ring is the length of S.

3、Collision point P to the distance of the connection point is equal to head pointer to the distance of the connection point, therefore, from the collision point, the head pointer to start walking, the point is the connection point.

4、add the result in the question 2 and 3