1. Program to count the total number of ways to reach the Nth stair is discussed here.

**DESCRIPTION:**There are n stairs, a person standing at the bottom wants to reach the top. The person can climb either 1 stair or 2 stairs at a time.

Count the total number of ways, the person can reach the top.

**Sample Input:**

4 (Number of stairs)

**Sample Output:**

5 (Number of ways)

**Explanation:**

**Way 1:** 1-1-1-1-1

**Way 2:** 1-2-1

**Way 3:** 2-1-1

**Way 4:** 1-1-2

**Way 5:** 2-2

2. Program to solve Sudoku using backtracking is discussed here.

Given a matrix of 9\*9 incomplete sudoku (unassigned places are represented by 0). Check whether you can complete it. If so print the Sudoku or else, print "Np".

3. 3. Program to detect a loop in linked list and removing the loop from the linked list is discussed here. Firstly, let us learn what a loop in a linked list means.

## What is a loop in a linked list?

Loop in a linked list means the list can be traversed endlessly. If you traverse a linked list with a loop, the nodes in the linked list will be visited again and again.