**nth digit of Fibonacci**

[maths](http://www.practice.geeksforgeeks.org/tag-page.php?tag=maths&isCmp=1)[series](http://www.practice.geeksforgeeks.org/tag-page.php?tag=series&isCmp=1)

A Fibonacci series written in order without any spaces in between. Find the Nth digit.

**Input:**  
First line of input contains number of test cases T. Each line of test case contain a number N.  
  
**Output:**  
Display the Nth digit in Fibonacci series.  
  
**Constraints:**  
1 <=T<= 30  
1 <= N<= 100  
  
**Example:**

**Input:**  
3  
10  
3  
25

**Output:**  
1  
2  
7

\*\*For More Examples Use Expected Output\*\*

<http://www.practice.geeksforgeeks.org/problem-page.php?pid=529>

#include <iostream>

#include <stdio.h>

#include <vector>

using namespace std;

int main() {

        int t;

        scanf("%d", &t);

        while(t--) {

            int n;

            scanf("%d", &n);

            std::vector<int> fib;

            fib.push\_back(1);

            fib.push\_back(1);

            std::string concat = "11";

            for(int i =2; concat.length() <= n; i++){

                fib.push\_back(fib[i-1] + fib[i-2]);

                concat +=  std::to\_string(fib[i]) ;

            }

            cout <<  concat[n-1]  << endl;

        }

}