**Type of input**

[maths](http://www.practice.geeksforgeeks.org/tag-page.php?tag=maths&isCmp=0)

Given an input N , print the data type of the input N.  
eg  
Sequence of digits -- int  
Sequence of digits with a dot -- float  
Sequence of chars  -- string  
Single non-digit char --- char  
  
**Input:**  
The first line of input contains an integer T denoting the number of test cases.  
The first line of each test case is N.  
  
**Output:**  
Print the data type of the input.  
  
**Constraints:**  
1 ≤ T ≤ 50  
1 ≤ length of input ≤ 100  
  
**Example:**  
**Input:**  
2  
12  
gfg  
  
**Output:**  
int  
string

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

<http://www.practice.geeksforgeeks.org/problem-page.php?pid=661>

import java.util.\*;

import java.lang.\*;

import java.io.\*;

class GFG {

public static void main(String[] args) {

// TODO code application logic here

Scanner sc = new Scanner(System.in);

int t = Integer.parseInt(sc.nextLine());

while(t-- > 0) {

String n = sc.nextLine();

if(n.length() == 1) {

if(!Character.isDigit(n.charAt(0))) {

System.out.println("char");

continue;

}

}

String ans = "string";

boolean todosNums = true;

int i ;

for( i =0; i<n.length(); i++) {

if(Character.isLetter(n.charAt(i))) {

todosNums = false;

break;

}

}

if(i < n.length()) {

System.out.println(ans);

continue;

}

if(todosNums) {

if(n.indexOf(".") > -1){

ans = "float";

}else{

ans = "int";

}

}

System.out.println(ans);

}

}

}