Question 04:-

Given a function f(x) on floating number x and two numbers 'a' and 'b' such that **f(a)*f(b) <** 0 and **f(x) is continuous in [a, b]** . Here f(x) represents algebraic equation. You have to find root of function in interval [a, b] upto three digits after decimal.

Input:

t =number of test case;

Y = coefficient sequence of N+1 ; exp :- **equation x^3-x^2+2=0 coefficient sequence is [1 -1 0 2];**

a ,

b= interval point;

output:-

r = root of function in given interval;

if root is not exist in given interval then **print "not exist";**

Sample input:-

3

[1 -1 0 2]

-200

300

[1 0 -1 -2]

1

2

[1 0 1 -1]

1

2

Sample output:

-1.000

1.521

not exist