**Java Code**

import java.util.Scanner;

class Q2

{

public static void main(String args[])

{

double u=100,l=0,x=50,a,b,k,v;

//u is upper bound for x being 100 as it is percentage

//l is lower bound for x being 0

//x is mid at 50

//user inuts of the equation a,b,k

//v is value calculated at x;

//a and b are positive

//k may or may not be negative

//equation represented as x^a+x^b=-k hence just finding k using binary search

//in 0 to 100 in x^a+x^b which is an incresing function between 0 and 100

//(INTERPOLLATION SEARCH MAY ALSO BE USED)

Scanner sc=new Scanner(System.in);

a=sc.nextDouble();

b=sc.nextDouble();

k=sc.nextDouble();

if(k<=0 && k<calculate(a,b,100))//value in between only if k is negative as x^a+x^b is always positive

//checking if root lies between 0 and 100

//same as checking if a value lies between first and last element of a sorted array to check if it is in the array

{

while(Math.floor(u\*Math.pow(10,10))!= Math.floor(l\*Math.pow(10,10)))//finding upto the 10th decimal place in biinary search

{

x=(u+l)/2;//x is in between

v=calculate(a,b,x);

if(-k>v)

l=x;

else if(-k<v)

u=x;

else

break;//break if equal

}

x = x\*10000000;

System.out.print(x%10>=5?((int)(x/10)+1)/1000000.0:(int)(x/10)/1000000.0);//print percentage

}

else

if(-(Math.pow(100,a+1)/(a+1)+Math.pow(100,b+1)/(b+1)+k\*100)>=0)

//the function at x=0 gives 0 and if it gives positive value at x=100, 100 is suggested

System.out.println("100.0");

else

System.out.println("0.0");

}

static double calculate(double a,double b,double x)

{

return Math.pow(x,a)+Math.pow(x,b);//calculating

}

}