```java
public class sol{


    public static double solveeqn(double x, double tolerance )
    {
        boolean  run = true;
        while(run == true)
            {
                System.out.println("****");
                double y = Math.cbrt(1+x);
                double dist = Math.abs(x-y);
                 if(dist < tolerance)
                 {
                     return y;
                }
                 else{
                     x = y;
                 }

            }
        return 0;
    }


    public static void main(String args[] ){

        double b = 0.5;
        double a = solveeqn(b, .0001);

        System.out.println("Solution is  " + a);

    }



}
```