BounceCount.java

```
package programmingAssignment3;

import java.util.Scanner;

public class BounceCount
{

    public static void main(String[] args) throws IOException
    {
        System.out.println("Welcome to Bounce Ball. It calculates the bounciness of a
ball.");
        //Declaring variables
        double dropheight;
        double firstbounce;
        int numberofbounces;
        double distance;
        double bouncinessindex;
        int actualbounces;
        //Read the variables
        File inputFile = new File( "bouncedata.txt" );
        Scanner file = new Scanner( inputFile );

        DecimalFormat decimal = new DecimalFormat("0.00000000");
        while ( file.hasNext( ))
        {
            //read first number
            dropheight = file.nextInt( );
            firstbounce = file.nextInt( );
            numberofbounces = file.nextInt( );
            //Calculate the values
            distance = 0;
            bouncinessindex = (firstbounce/dropheight);
            System.out.println( "The dropheight is " + dropheight );
            System.out.println( "The firstbounce is " + firstbounce );
            System.out.println( "The numberofbounces is " + numberofbounces );
            distance = (dropheight + firstbounce);
            actualbounces = 1;
            while (firstbounce > 0.001 && actualbounces != numberofbounces)
            {
                distance += (firstbounce);
                firstbounce *= (bouncinessindex);
                distance += (firstbounce);
                actualbounces++;
            }
            System.out.println( "The distance is " + decimal.format(distance) );
            System.out.println( "The number of actualbounces is " + actualbounces );

        }//while

    }//main

}//class
```