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/*--- HW20.java ---*/
import java.util.*;
import java.io.*;
/**
Class HW20 that creates Readers and inputs them into a Scanner to read from
either standard input or from a file. These are meant to read integers
which are used for a computation. Errors are give with messages and Line
numbers where the error was found.
@author Thompson, Joshua - 206360
*/
public class HW20 {
    /**
    Main method of HW20 class. Creates a scanner which is based off
    of a reader from standard in or a FileReader. Then converts them
    into a LineNumberReader which is then used in the creation of a
    scanner object. Then used to get integers for a computation.
    LineNumberReader is used to print the line number in the error.
    @param args Input desired file as input, otherwise default to stdin
    */
    public static void main(String[] args) {
        Reader r = new InputStreamReader(System.in);
        boolean fileCheck = false;
        FileReader f = null;
        try{
            if(args.length > 0)
            {
                fileCheck = true;
                try{
                    f = new FileReader(args[0]);
                } catch (IOException e) {
                    e.printStackTrace();
                    System.exit(1);
                }
            }
        } catch(Throwable e) {
            System.out.println("some shit happened");
        }

        Scanner sc = null;
        LineNumberReader lnr = null;
        if(fileCheck)
            lnr = new LineNumberReader(f);
        else
            lnr = new LineNumberReader(r);

        sc = new Scanner(lnr);

        try {
            System.out.println(Mystery.compute(sc));
        } catch (Exception e) {
            System.out.println("Error " + e.getMessage() + " at line " + lnr.getLineNumbe
r());
        }
    }
}
```