Instructions for Codeburners

Ivor Page
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1 Basics

Codeburners is a Google Discussion Group with over 500 members. Its URL is:
http://groups.google.com/group/code-burners

To join the group, point your browser at this URL, click on “Sign in to view this group”, then click on SIGN UP (in red) and enter enough information to become a member.

Once you get an email saying that you are a member (it may take a day or so), you will begin to get emails from me via Codeburners, informing you of weekly problems, 3-hour UTD Contests, and other Codeburners stuff.

DON’T REPLY DIRECTLY TO EMAILS FROM CODEBURNERS BECAUSE ALL 500+ MEMBERS WILL RECEIVE YOUR EMAIL. If you have a question or a concern, email: ivor@utdallas.edu

You can also visit the website to see the entire history of Codeburners emails, containing weekly problems etc. Some members switch off the email feed and just go to the webpage every few days to see what’s new (requires discipline). To do so, go to the URL above and find your way to the “Discussions” section. The latest item should be on the top. Each item is a discussion thread. Click on one and you will see several messages on that topic.

Weekly problems will make use of the UVa online judge at
www.uva.onlinejudge.org
go there and create an account for yourself. To submit a solution to a
problem, login at the UVa site, click on Browse Problems, click on the
Contest Volume containing the problem, and then scan for the problem
description. Click on SUBMIT when you are ready to try your solution,
follow the online instructions, giving language and source code and submit
your solution. In a few seconds or minutes, click on “My Submissions” to
see the judge’s response.

Experienced users use the “Quick Submit” button where you only need
to input the problem number and submit your source code.

To view a problem description without logging in to the UVa site, try
www.uvatoolkit.com
You can input a keyword or two from the title to get a list of UVa problem
titles containing those words. Then click on the little blue sphere at the
right of the problem title to see the problem specification.

2 Java programmers

You MUST call your source file Main.java (and your main class Main). Your
source code MUST NOT contain the "package" construct. Your program
MUST read from System.in and write to System.out. Do not output any
prompts. Your program’s output must exactly match the sample output
given in the problem specification.

2.1 Example

import java.util.*;
/**
 * UVa Problem 100: The 3n + 1 problem
 */
public class Main {
    public static int cycleLength(long n) {
        int count = 1;
        while (n > 1) {
            count++;
            n = n / 2;
        }
        return count;
    }
}
if((n&1)==0) n = n/2; // n is even
else n = 3*n + 1; // n is odd
}
return count;
}
public static void main(String[] args) {
Scanner cin = new Scanner(System.in);
PrintStream cout = System.out;
while (cin.hasNextInt()) {
    int a = cin.nextInt();
    int b = cin.nextInt();
    int maxCycleLen = 0;
    int sIdx = Math.min(a, b); // in at least one case the judge's
    int eIdx = Math.max(a, b); // test data has a>b
    for (int i = sIdx; i <= eIdx; i++)
        maxCycleLen = Math.max(maxCycleLen, cycleLength(i));
    cout.printf("%d %d %.d\n", a, b, maxCycleLen);
}
}