

ECOO Round 3 QUESTIONS

May 11, 2013

Problem 3: Go With the Flow

FIRST TRY

Suggested Marking Scheme

Input file name: DATA31.txt

Award 10 marks for each exactly correct board. Deduct 10 marks one time if any pair of boards is not separated by exactly one blank line. Allow students to produce boards under input control or scroll their output window if necessary. Any board that takes more than 10 seconds to appear should be scored 0 points.

Award 10 bonus marks if all 10 boards are exactly correct and appear within the time limits.

11111	11112	333333	1166666	2222222
12221	13322	312223	1264446	2111112
32341	13444	311111	1264346	2132222
33341	43454	333334	1264346	4536666
44441	44455	455554	1265346	4536333
		444444	1265346	4533373
12333	111111		1225366	4577773
12223	222231	112222		
11423	244435	134442	1111666	1111112
44423	245535	133342	1231646	1344432
42223	242535	111142	2231646	1335532
	222555	444442	2533646	1135332
		422222	2555546	6133311
			6777546	6111116
			6666666	6666666

Note: Output is shown here in 5 columns but should be a single column in the students' output.

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Problem 3: Go With the Flow

SECOND TRY

Suggested Marking Scheme

Input file name: DATA32.txt

Award 10 marks for each exactly correct board. Deduct 20 marks one time if any pair of boards is not separated by exactly one blank line. Allow students to produce boards under input control or scroll their output window if necessary. Any board that takes more than 10 seconds to appear should be scored 0 points.

12222	11111	111222	1122333	4444441
11332	22324	133332	1342353	4222241
41132	23324	334452	3342253	4333241
43332	23224	344652	3244253	4453341
43222	22244	366652	3222253	6655511
		222222	3555553	6777557
			3333333	6667777
11111	111111			
12221	225551	112222		
31111	325451	122333	1111444	4444444
31444	355441	144563	1444424	4122224
33333	356641	114563	1422224	4123334
	356111	511563	1423334	4113555
		555533	1423225	4413567
			1422265	5413567
			1466665	5555567

Note: Output is shown here in 5 columns but should be a single column in the students' output.