Exercise sheet 9

Exercise 1

Step	Test case																	Test	
0		x	x	m	x	o	x	n	x	t	x	x	a	x	g	x	x	FAIL	
1	cx-c2	x	x	m	x	o	x	n	x	.	.	.	.	.	.	.	.	PASS	Testing cx-c1 and cx-c2. (n=2)
2	cx-c1	.	.	.	.	.	.	.	.	t	x	x	a	x	g	x	x	PASS	Increase granularity (n=4)
3	c1	x	x	m	x	.	.	.	.	.	.	.	.	.	.	.	.		
4	c2	.	.	.	.	o	x	n	x	.	.	.	.	.	.	.	.		
5	c3	.	.	.	.	.	.	.	.	t	x	x	a	.	.	.	.		
6	c4	.	.	.	.	.	.	.	.	.	.	.	.	x	g	x	x		
7	cx-c1	.	.	.	.	o	x	n	x	t	x	x	a	x	g	x	x	PASS	Testing cx-c1,...,cx-c4 (n=4) Note the **difference between the algorithm presented in the lecture and the original one from the paper of Zeller**. In the algorithm from the lecture we do not separately test every ci, but directly move on to checking their complements, i.e., cx-ci. Here we show the values of considered ci's only for the sake of completeness.
8	cx-c2	x	x	m	x	.	.	.	.	t	x	x	a	x	g	x	x	PASS	
9	cx-c3	x	x	m	x	o	x	n	x	.	.	.	.	x	g	x	x	PASS	
10	cx-c4	x	x	m	x	o	x	n	x	t	x	x	a	.	.	.	.	PASS	Increase granularity
11	c1	x	x	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
12	c2	.	.	m	x	.	.	.	.	.	.	.	.	.	.	.	.		
13	c3	.	.	.	.	o	x	.	.	.	.	.	.	.	.	.	.		
14	c4	.	.	.	.	.	.	n	x	.	.	.	.	.	.	.	.		
15	c5	.	.	.	.	.	.	.	.	t	x	.	.	.	.	.	.		
16	c6	.	.	.	.	.	.	.	.	.	.	x	a	.	.	.	.		
17	c7	.	.	.	.	.	.	.	.	.	.	.	.	x	g	.	.		
18	c8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	x	x		
19	cx-c1	.	.	m	x	o	x	n	x	t	x	x	a	x	g	x	x	FAIL	Testing cx-c1,...,cx-c8 (n=8). Reduce to cx=cx-c1; continue with n=7
20	c1			m	x	.	.	.	.	.	.	.	.	.	.	.	.		

21	c2		.	.	o	x	.	.	.	.	.	.	.	.	.	.			
22	c3		.	.	.	.	n	x	.	.	.	.	.	.	.	.			
23	c4		.	.	.	.	.	.	t	x	.	.	.	.	.	.			
24	c5		.	.	.	.	.	.	.	.	x	a	.	.	.	.			
25	c6		.	.	.	.	.	.	.	.	.	.	x	g	.	.			
26	c7		.	.	.	.	.	.	.	.	.	.	.	.	x	x			
27	cx-c1		.	.	o	x	n	x	t	x	x	a	x	g	x	x	PASS		
28	cx-c2		m	x	.	.	n	x	t	x	x	a	x	g	x	x	PASS		
29	cx-c3		m	x	o	x	.	.	t	x	x	a	x	g	x	x	PASS		
30	cx-c4		m	x	o	x	n	x	.	.	x	a	x	g	x	x	PASS		
31	cx-c5		m	x	o	x	n	x	t	x	.	.	x	g	x	x	PASS		
32	cx-c6		m	x	o	x	n	x	t	x	x	a	.	.	x	x	PASS		
33	cx-c7		m	x	o	x	n	x	t	x	x	a	x	g	.	.	FAIL	Testing cx-c1,…,cx-c7 (n=7). Reduce to cx=cx-c7; continue with n=6	
34	c1		m	x	.	.	.	.	.	.	.	.	.	.					
35	c2		.	.	o	x	.	.	.	.	.	.	.	.					
36	c3		.	.	.	.	n	x	.	.	.	.	.	.					
37	c4		.	.	.	.	.	.	t	x	.	.	.	.					
38	c5		.	.	.	.	.	.	.	.	x	a	.	.					
39	c6		.	.	.	.	.	.	.	.	.	.	x	g					
40	cx-c1		.	.	o	x	n	x	t	x	x	a	x	g			PASS		
41	cx-c2		m	x	.	.	n	x	t	x	x	a	x	g			PASS		
42	cx-c3		m	x	o	x	.	.	t	x	x	a	x	g			PASS		
43	cx-c4		m	x	o	x	n	x	.	.	x	a	x	g			PASS		
44	cx-c5		m	x	o	x	n	x	t	x	.	.	x	g			PASS		
45	cx-c6		m	x	o	x	n	x	t	x	x	a	.	.			PASS	Testing cx-c1,…,cx-c6 (n=6). Increase granularity (n=12)	
46	c1		m	.	.	.	.	.	.	.	.	.	.	.					
47	c2		.	x	.	.	.	.	.	.	.	.	.	.					
48	c3		.	.	o	.	.	.	.	.	.	.	.	.					
49	c4		.	.	.	x	.	.	.	.	.	.	.	.					
50	c5		.	.	.	.	n	.	.	.	.	.	.	.					
46	c6		.	.	.	.	.	x	.	.	.	.	.	.					
47	c7		.	.	.	.	.	.	t	.	.	.	.	.					

48	c8			.	.	.	.	.	.	.	x	.	.	.	.							
49	c9			.	.	.	.	.	.	.	.	x	.	.	.							
50	c10			.	.	.	.	.	.	.	.	.	a	.	.							
46	c11			.	.	.	.	.	.	.	.	.	.	x	.							
47	c12			.	.	.	.	.	.	.	.	.	.	.	g							
48	cx-c1			.	x	o	x	n	x	t	x	x	a	x	g					PASS	Testing cx-c1,...,cx-c12 (n=12)	
49	cx-c2			m	.	o	x	n	x	t	x	x	a	x	g					FAIL	Reduce to cx=cx-c2; continue with n=11	
50	c1			m		.	.	.	.	.	.	.	.	.	.							
51	.....																					
...	cx-c3			m		o	.	n	x	t	x	x	a	x	g					FAIL	Reduce cx=cx-c3; continue with n=10	
				m		o		n		t			a		g						**FINAL result**	

Exercise 2

See an attached file on the homepage.