

CSE376 Homework 2 (10/23/2011)

Name:	
SBID:	
Grader:	Yaroslav Markov
General Comments:	

	Max	Actual	Comments
Part 1: Writing Code with Errors (BCC Check show Up or Core Dump)	22	0	
01: Overflow a statically allocated array	1	0	
02: Underflow a statically allocated array	1	0	
03: Overflow a dynamic array.	1	0	
04: Underflow a dynamic array.	1	0	
05: free(0)	1	0	
06: free(NULL)	1	0	
07: freeing non-heap memory	1	0	
08: double-free	1	0	
09: reallocing non-heap	1	0	
10: use after free	1	0	
11: dereferencing 0	1	0	
12: dereferencing small positive/negative values	1	0	
13: non-aligned access	1	0	Only on a-solaris8
14: overlapping memcpy	1	0	
15: comparing across types	1	0	BCC may not catch.
16: illegal pointer	1	0	
17: reading uninitialized memory	1	0	BCC may not catch.
18: memcpy(NULL, ptr, len)	1	0	
19: memcpy(ptr, NULL, len)	1	0	
20: memcpy(ptr, NULL, 0)	1	0	
21: referencing popped variable	1	0	
22: referencing unchecked static object	1	0	BCC may not catch.

	44	0	
Part 1: Writing Code with Errors (Inspection)			
Your code must compile, otherwise it will not receive any credit in this section.			
01: Overflow a statically allocated array	2	0	
02: Underflow a statically allocated array	2	0	
03: Overflow a dynamic array.	2	0	
04: Underflow a dynamic array.	2	0	
05: free(0)	2	0	
06: free(NULL)	2	0	
07: freeing non-heap memory	2	0	
08: double-free	2	0	
09: reallocing non-heap	2	0	
10: use after free	2	0	
11: dereferencing 0	2	0	
12: dereferencing small positive/negative values	2	0	
13: non-aligned access	2	0	
14: overlapping memcpy	2	0	

15: comparing across types	2	0
16: illegal pointer	2	0
17: reading uninitialized memory	2	0
18: memcpy(NULL, ptr, len)	2	0
19: memcpy(ptr, NULL, len)	2	0
20: memcpy(ptr, NULL, 0)	2	0
21: referencing popped variable	2	0
22: referencing unchecked static object	2	0
Part 2: Makefile	16	0
prog-XX-bcc and prog-XX-gcc build the programs with the correct compiler	7	0
run-XX-gcc and run-XX-bcc run corresponding programs	3	0
all-bcc and all-gcc rules	3	0
clean rule	3	0
Part 3: malloc-debugging library	18	0
Warn on double free	6	0
Warn on leaked memory at program termination	6	0
Warn on freeing in the middle of an xmalloced region	6	0
Extra Credit: ElectricFence and Make Depend	12	0
depend rule for Makefiles	4	0
ElectricFence: One point for each demonstrated problem (up to four)	8	0
General Demerits	0	0
Followed CVS submission guidelines improperly	0	0
Submission on time: deduct 1 point for every late hour (time rounded up in units of one hour)	0	0
Total Grade (out of 100)	100	0
Total Extra Credit	12	0