

Assignment 2: Concolic Testing

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1 Intro

All complete code can be found in the Appendix section §6.

2 Discussion Point 1

2.1 Legend

TODO Add table symbol explanations.

2.2 Iteration 1

Code	Concrete Store	Symbolic Store	Path Conditions
main () {			
var x , y , z ;			
x = input ;	[x -> 0] (input = 0)	[x -> a]	
z = input ;	[x -> 0, z -> 0] (input = 0)	[x -> a, z -> b]	
y = &x ;	[x -> 0, z -> 0, y -> x]	[x -> a, z -> b, y -> x]	
if (x > 0) {	[x -> 0, z -> 0, y -> x]	[x -> a, z -> b, y -> x]	[!(a > 0)]
y = &z ;	/	/	
} else {			
*y = input ;	[x -> 0, z -> 0, y -> x] (input = 0)	[x -> a, z -> b, y -> x]	
}			
*y = *y + 7 ;	[x -> 7, z -> 0, y -> x] (7 + 0)	[x -> a, z -> b, y -> x]	
if (2 > z) {			[!(a > 0) and !(2 > (b + 7))]
if (*y == 2647) {	/	/	/
error 1 ;	/	/	/
}	/	/	/
}	/	/	/
return *y ;	7		
}	-	-	[!(a > 0) and !(2 > (b + 7))]

2.3 Iteration 2

3 Discussion Point 2

4 Discussion Point 3

5 Discussion Point 4

6 Appendix

6.1 Discussion Point 1

6.2 Discussion Point 2

6.3 Discussion Point 3

6.4 Discussion Point 4

Bibliography