

- 4)
 - 4.1) $413\text{ms} + 268\text{ms} = 681\text{ms}$
 - 4.2) Could not find the "MiniSat" solver
 - 4.3) Warning: JNI-based SAT solver does not work on this platform.
- 5)
 - 5.1) Viz, Tree, and XML
 - 5.2) 8
 - 5.3) The most recent
 - 5.4) The size of the type scopes specified in the command and the SAT solver used
- 9)
 - 9.1) addr
 - 9.2) 0
- 10)
 - 1
- 11)
 - 11.1) To limit the number of objects in each signature to 3
 - 11.2) To limit the number of Book object to 1
- 12)
 - 12.1) More than one name can map to a single address
 - 12.2) It means to find an instance where the book has more than one name per address
- 13)
 - lone
- 16) Instead of looking for a single name now we are looking for the entire set of names
- 20)
 - 20.1) 2
 - 20.2) "run show for 3 but 1 Book" and "run add for 3 but 2 Book"
- 21)
 - They show what parameter each object was assigned as
- 22)
 - 22.1) We swapped the sides of the equality so instead of asking if the new address book is the same as the old address book plus a new link we are asking the reverse.
 - 22.2) They are both still equal to each other
- 24)
 - 24.1) It means the result of the function is the set of address specified in the body of the Addr
 - 24.2) The body of a function is an expression instead of a constraint

25)

If you add an address that already exists nothing happens but the delete will remove the address

26)

This change limited our assertion to only instances where the book didn't already contain the address

27)

27.1) 43 ms

27.2) 150 ms