CS433 Q 1: Consider four nodes t1, t2, t3, t4 in an EUF constraints. There may be other nodes in the constraints. After running congruence-closure, which of the following are impossible states of RightEquiv, LeftEquiv, and BothEquiv?

☐ RightEquiv = {{t4}, {t1 , t2 , t3},}, LeftEquiv = {{t4 , t2}, {t1 , t3},}, BothEquiv = {{t4}, {t2}, {t1}, {t3},}
RightEquiv = {{t4, t1}, {t2, t3},}, LeftEquiv = {{t4, t2}, {t1, t3},}, BothEquiv = {{t4, t2}, {t1, t3},}
☐ RightEquiv = {{t4, t2}, {t1, t3},}, LeftEquiv = {{t4, t2}, {t1, t3},}, BothEquiv = {{t4}, {t2}, {t1, t3},}
RightEquiv = {{t4, t1, t2, t3},}, LeftEquiv = {{t4, t2}, {t1, t3},}, BothEquiv = {{t4, t1}, {t2, t3},}

#### Answer

Note: please be careful before submitting the answer. You will not be able to change the answers.

CS433 Q 1: Consider four nodes t1, t2, t3, t4 in an EUF constraints. There may be other nodes in the constraints. After running congruence-closure, which of the following are impossible states of RightEquiv, LeftEquiv, and BothEquiv?

You have answered the following:

★ RightEquiv = {{t4}, {t1 , t2 , t3}, ...}, LeftEquiv = {{t4 , t2}, {t1 , t3}, ...}, BothEquiv = {{t4}, {t2}, {t1}, {t3}, ...} (You are incorrect)

★ RightEquiv = {{t4, t1}, {t2, t3}, ...}, LeftEquiv = {{t4, t2}, {t1, t3}, ...}, BothEquiv = {{t4, t2}, {t1, t3}, ...} (You are incorrect)

✓ RightEquiv = {{t4 , t2}, {t1 , t3}, ...}, LeftEquiv = {{t4 , t2}, {t1 , t3}, ...}, BothEquiv = {{t4}, {t2}, {t1}, {t3}, ...} (You are correct)

✓ RightEquiv = {{t4, t1, t2, t3}, ...}, LeftEquiv = {{t4, t2}, {t1, t3}, ...}, BothEquiv = {{t4, t1}, {t2, t3}, ...} (You are correct)

Previous question

Next question



# CS433 Q 2: Which of the following are true sentences debugging Z3?

	☐ Tactics layer in Z3 is for management of solving heuristics		
	□ Z3 is written in Java		
	☐ Breakpoints breaks the code and we need to rewrite the code		
☐ git is a code management system			
	Answer		

Note: please be careful before submitting the answer. You will not be able to change the answers.



#### CS433 Q 2: Which of the following are true sentences debugging Z3?

You have answered the following:

V Tactics layer in Z3 is for management of solving heuristics (You are correct)

X Z3 is written in Java (You are correct)

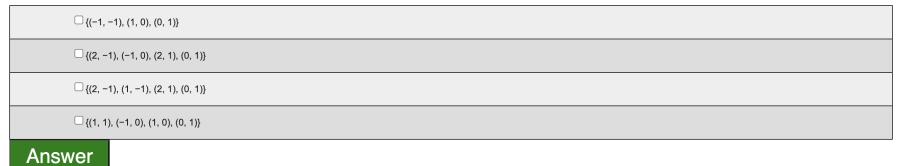
X Breakpoints breaks the code and we need to rewrite the code (You are correct)

V git is a code management system (You are correct)

Previous question

Next question

### CS433 Q 3: Which of cone(s) cover the whole 2-D vector space?



Note: please be careful before submitting the answer. You will not be able to change the answers.

RollNo. 23B0912 Home Logout

# CS433 Q 3: Which of cone(s) cover the whole 2-D vector space?

ou	Have	answei	eu the	: Tollowing.

**x** {(−1, −1), (1, 0), (0, 1)} (You are incorrect)

√ {(2, -1), (-1, 0), (2, 1), (0, 1)} (You are correct)

**x** {(2, −1), (1, −1), (2, 1), (0, 1)} (You are correct)

**x** {(1, 1), (−1, 0), (1, 0), (0, 1)} (You are correct)

Previous question

Next question

# CS433 Q 4: Which of the following are true about unsatisfiability certificate in linear arithmetic?

☐ [1 1 0] is a certificate of unsatisfiability of $2x + y \le 0 \land -x + y \le 0 \land x - 2y \le -1$
☐ [1 3 3] is a certificate of unsatisfiability of 2x + y ≤ 1 ∧ -x + y ≤ 0 ∧ -y ≤ -1
☐ [1 0 0] is a certificate of unsatisfiability of 0 ≤ −1 ∧ −x + y ≤ 0 ∧ −y ≤ −1
☐ [1 1 1] is a certificate of unsatisfiability of 2x + y ≤ 0 ∧ -x + y ≤ 0 ∧ x - 2y ≤ -1
A manuali

Answer

Note: please be careful before submitting the answer. You will not be able to change the answers.

RollNo. 23B0912 Home Logout

# CS433 Q 4: Which of the following are true about unsatisfiability certificate in linear arithmetic?

You have answered the following:		
$x$ [1 1 0] is a certificate of unsatisfiability of 2x + y ≤ 0 $\wedge$ -x + y ≤ 0 $\wedge$ x - 2y ≤ -1 (You are correct)		
$x$ [1 3 3] is a certificate of unsatisfiability of 2x + y ≤ 1 $\wedge$ -x + y ≤ 0 $\wedge$ -y ≤ -1 (You are correct)		
v [1 0 0] is a certificate of unsatisfiability of 0 ≤ -1 ∧ -x + y ≤ 0 ∧ -y ≤ -1 (You are correct)		
[1 1 1] is a certificate of unsatisfiability of 2x + y ≤ 0 ∧ −x + y ≤ 0 ∧ x − 2y ≤ −1 (You are correct)		

Previous question

Next question