|  |  |  |  |
| --- | --- | --- | --- |
|  | < | = | > |
| < | < | < | <, =, > (A) |
| = | < | = | > |
| > | <, =, > | > | > |

T1 <t2 , t2 >t3 -> A(t1, t3)

T1 < t3

|  |  |  |  |
| --- | --- | --- | --- |
|  | < | = | > |
| <, =, > | < | = | > |
| <, =, > | < | = | > |
| <, =, > | < | = | > |
| < | < | unsat | unsat |
| = | unsat | = | unsat |
| > | unsat | unsat | > |

Example of unatisfiability

t1, t2, t3, (t1 < t2), (t2 = t3), (t1 = t3)

(t1 < t2) ^ (t2 =t3) -> (t1 < t3)

Example rules:

Instant(i)^Instant(j)^Instant(k)^precedes(i,j)^precededBy(j,k) -> A(i,k)

Instant(i)^Instant(j)^A(i,j)^precedes(i,j)->precedes(i,j)

Instant(i)^Instant(j)^precedes(i,j)^occursSimultaneouslyWith(i,j)->unsatisfiable(i,j)