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HW 8, Regression Testing

	1	2	3	4	5	6
t_1	0	1	0	1	0	1
t_2	1	0	0	0	1	0
t_3	1	1	0	1	0	0
t_4	1	0	1	0	0	0
t_5	0	1	0	1	1	0
t_6	1	0	0	0	0	0

Step 1: 3 and 6 has single 1's

$$LC = \{3, 6\}$$

t_1 covers 2, 4, 6 and t_4 covers 1, 3

$$\text{minCov} = \{t_1\}$$

Step 2:

$$LC = \{3\}$$

Select t_4 as t_4 covers 3

$$\text{minCov} = \{t_1, t_4\}$$

Step 3:

$$LC = \{5\}$$

Select t_2 or t_5

$$\text{minCov} = \{t_1, t_4, t_5\} \text{ or } \{t_1, t_4, t_2\}$$

QV2)

test (t)	Methods covered (cov(t))	cov(t)
t ₁	m ₁ m ₃ m ₅ m ₆ m ₈	5
t ₂	m ₁ m ₇ m ₈	3
t ₃	m ₁ m ₂ m ₃ m ₅	4
t ₄	m ₁ m ₂ m ₃ m ₄	4
t ₅	m ₁ m ₅ m ₆	3

1) here,

t₁ has the largest number of methods covered (5)

PrT = < t₁ >, entities covered = { m₂, m₄, m₇ }

X' = { t₂, t₃, t₄, t₅ }

2) here,

resCov(t₂) = { m₂, m₄ } = 2

resCov(t₃) = { m₄, m₇ } = 2

resCov(t₄) = { m₇ } = 1 (minimum)

resCov(t₅) = { m₂, m₄, m₇ } = 3

t₄ has minimum

PrT = < t₁, t₄ >

X' = (t₂, t₃, t₅), entitiesCov = { m₇ }

3) resCov(t₂) = 0 (minimum)

resCov(t₃) = 1

resCov(t₅) = 1

resCov(t₂) is minimum

PrT = < t₁, t₄, t₂ >

X' = { t₃, t₅ } entitiesCov = 0