CSE 4321 Homework 8

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| t1 | 0 | 1 | 0 | 1 | 0 | 1 |
| t2 | 1 | 0 | 0 | 0 | 1 | 0 |
| t3 | 1 | 1 | 0 | 1 | 0 | 0 |
| t4 | 1 | 0 | 1 | 0 | 0 | 0 |
| t5 | 0 | 1 | 0 | 1 | 1 | 0 |
| t6 | 1 | 0 | 0 | 0 | 0 | 0 |

Step 1: LC = {3,6}. t1 has three 1s and t4 has two 1s. Select t4. minCov = {t4}

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| t1 | 0 | 1 | 0 | 1 | 0 | 1 |
| t2 | 1 | 0 | 0 | 0 | 1 | 0 |
| t3 | 1 | 1 | 0 | 1 | 0 | 0 |
| t4 | 1 | 0 | 1 | 0 | 0 | 0 |
| t5 | 0 | 1 | 0 | 1 | 1 | 0 |
| t6 | 1 | 0 | 0 | 0 | 0 | 0 |

Mark entities covered by t4.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| t1 | 0 | 1 | 0 | 1 | 0 | 1 |
| t2 | 1 | 0 | 0 | 0 | 1 | 0 |
| t3 | 1 | 1 | 0 | 1 | 0 | 0 |
| t4 | 1 | 0 | 1 | 0 | 0 | 0 |
| t5 | 0 | 1 | 0 | 1 | 1 | 0 |
| t6 | 1 | 0 | 0 | 0 | 0 | 0 |

Step 2: LC = {6}. Select t1, as t1 is the only one covers 6. minCov = {t4, t1}

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| t1 | 0 | 1 | 0 | 1 | 0 | 1 |
| t2 | 1 | 0 | 0 | 0 | 1 | 0 |
| t3 | 1 | 1 | 0 | 1 | 0 | 0 |
| t4 | 1 | 0 | 1 | 0 | 0 | 0 |
| t5 | 0 | 1 | 0 | 1 | 1 | 0 |
| t6 | 1 | 0 | 0 | 0 | 0 | 0 |

Mark entities covered by t1.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| t1 | 0 | 1 | 0 | 1 | 0 | 1 |
| t2 | 1 | 0 | 0 | 0 | 1 | 0 |
| t3 | 1 | 1 | 0 | 1 | 0 | 0 |
| t4 | 1 | 0 | 1 | 0 | 0 | 0 |
| t5 | 0 | 1 | 0 | 1 | 1 | 0 |
| t6 | 1 | 0 | 0 | 0 | 0 | 0 |

Step 3: LC = {5}. Select t2. minCov = {t4, t1, t2}

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| t1 | 0 | 1 | 0 | 1 | 0 | 1 |
| t2 | 1 | 0 | 0 | 0 | 1 | 0 |
| t3 | 1 | 1 | 0 | 1 | 0 | 0 |
| t4 | 1 | 0 | 1 | 0 | 0 | 0 |
| t5 | 0 | 1 | 0 | 1 | 1 | 0 |
| t6 | 1 | 0 | 0 | 0 | 0 | 0 |

Mark entities covered by t2.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| t1 | 0 | 1 | 0 | 1 | 0 | 1 |
| t2 | 1 | 0 | 0 | 0 | 1 | 0 |
| t3 | 1 | 1 | 0 | 1 | 0 | 0 |
| t4 | 1 | 0 | 1 | 0 | 0 | 0 |
| t5 | 0 | 1 | 0 | 1 | 1 | 0 |
| t6 | 1 | 0 | 0 | 0 | 0 | 0 |

|  |  |  |
| --- | --- | --- |
| Test (t) | Methods covered (cov(t)) | |cov(t)| |
| t1 | m1, m3, m5, m6, m8 | 5 |
| t2 | m1, m7, m8 | 3 |
| t3 | m1, m2, m3, m5 | 4 |
| t4 | m1, m2, m3, m4 | 4 |
| t5 | m1, m5, m8 | 3 |

1: PrT = <t1>. entitiesCov = {m2, m4, m7}

2: resCov(t2) = {m2, m4}, resCov(t3) = {m4, m7}, resCov(t4) = {m7}, resCov(t5) = {m2, m4, m7}

PrT = <t1, t4>. entitiesCov = {m7}

3: resCov(t2) = {}, resCov(t3) = {m7}, resCov(t5) = {m7)

PrT = <t1, t4, t2>. entitiesCov = {}

4: PrT = <t1, t4, t2, t3, t5>