

Theory7

1.

(1)(a)

Solution: $O(n)$

Solution: $O(n/m)$

(2)(b)

Solution:

0 | 39 |

1 | NULL |

2 | 54 |-->| 67 |

3 | NULL |

4 | NULL |

5 | 5 |

6 | NULL |

7 | NULL |

8 | NULL |

9 | NULL |

10 | 23 |-->| 88 |-->| 75 |-->| 49 |

11 | NULL |

12 | NULL |

(2)(c)

Solution:

0	1	2	3	4	5	6	7	8	9	10	11	12
39	49	54	67		5					23	88	75

(1)(d)

Solution:

0	1	2	3	4	5	6	7	8	9	10	11	12
39	75	54	67		5	49				23	88	

(1)(e)

Solution: (HINT: Start by inserting the keys 36, 78, 12, 90.)

0	1	2	3	4	5	Key to insert: ____6____
36	78		90	12		

2.

(1)(a)

Solution: 该表的负载因子为 $15105/3021=5$; 负载因子告诉有关最长链的平均大小。

(2)(b)

Solution: "abc","bac"