

Assignment 7

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7.1. Collision Resolution.

(a) Hash table using linear probing.

0	1	2	3	4	5				9
[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]

7.2. Hash Table Size.

SOLUTION. In linear probing, we have:

$$U(L) = \frac{1}{2} \left[1 + \left(\frac{1}{1-L} \right)^2 \right]$$
$$S(L) = \frac{1}{2} \left[1 + \frac{1}{1-L} \right]$$